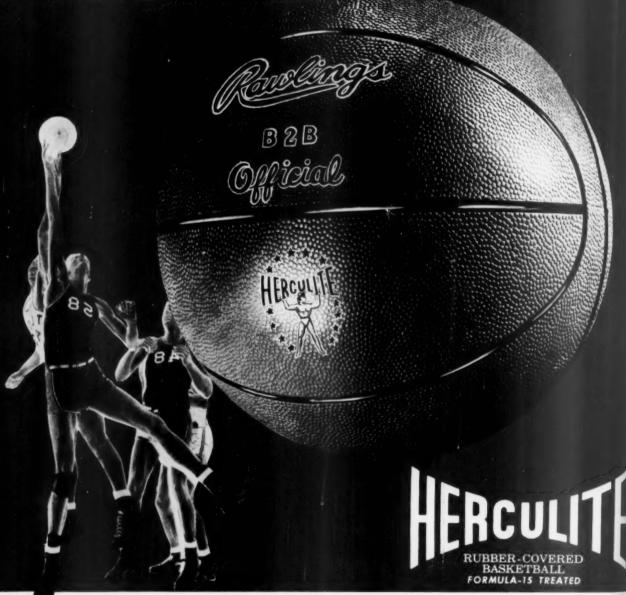
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Vol. XXXVII, No. 2 October, 1956

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### ATH LETIC JOURNAL

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#### October, 1956

7 BASKETBALL ARTICLES THE GUARD-BASKETBALL'S QUARTERBACK James W. Adkisson THE FOLLOW-UP GAME... Robert G. Dell BASKETBALL CURRICULUM 12 Franklin A. Lindeburg THE THINKING FREE LANCE OFFENSE 18 John Clark BASKETBALL IN THREE-QUARTER TIME Lee Graupman INDIVIDUAL DEFENSIVE FOOTWORK 27 Blair Gullion THE SECONDARY FAST BREAK 98 Jack Nagle 2 FOOTBALL ARTICLES BUILDING A PASS DEFENSE. Maru Levy MATERIAL SHORT? TRY THE 4-5 DEFENSE 11 Paul E. Massey 1 WRESTLING ARTICLE ESSENTIALS FOR WRESTLING 10 Mearl H. Greene 1 TRACK ARTICLE THE CONTROLLED INTERVAL METHOD OF DISTANCE RUNNING. 14 Dr. John K. Cherry and Walter W. Boehm 1 ARTICLE ON INTRAMURALS AN INTRAMURAL SPORTS AWARD FOR QUALITY PARTICIPATION. 24 L. W. Stevens and Eric Hughes 1 ARTICLE ON FACILITIES THE TWELVE FOOT LANE. 37 5 FEATURES FROM HERE AND THERE. **EDITORIALS** 20 FOR YOUR BULLETIN BOARD NEW ITEMS 34 57 BUYERS GUIDE

#### FRONT COVER ILLUSTRATION

We try, as much as possible, to tie our front cover picture in with one of the lead articles. This time it was easy—we merely used additional pictures which were taken at the same time as those appearing in Blair Gullion's masterful article. Of interest from a photographic standpoint is the fact that the larger picture is a blow-up from a negative film measuring  $\frac{1}{2}$ "x1".

#### A Look At This Issue and a Glance Ahead

THE first of our new series "For Your Bulletin Board" appears in the center of this issue. A year ago at this time the feature was started, and like every innovation we were curious as to how it would be received. The response was most gratifying, so much so, in fact, that we have prepared five inserts for this year. We start out with the dribble this month and will follow it next month with a feature on shooting. It is our feeling that the pendulum in basketball, as in football, is swinging toward

greater emphasis upon defensive play. Blair Gullion's detailed insight into "Individual Defensive Footwork" should prove highly beneficial. We have not neglected football and, in addition, present articles on track, wrestling, and intramurals. Next month in our lead article Bucky O'Connor describes, with the aid of our high-speed camera, Iowa's warmup drill—the drill which caused so much comment following the telecast of the Iowa-Illinois basketball game.



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FOR EVERY SPORT



HOSE who follow football in the THOSE who follow localing the Southwest Conference claim the only thing certain is that the championship race each year is uncertain. We agree, but hasten to point out that there is a striking similarity between the percentage of championships won by a school and the percentage of its football players selected for the allconference team. . . . For example, going back to 1915, there were 41 champions or co-champions. Since 1921 an all-conference team has been selected. The first percentage listed after each school represents the number of championships won or shared. The second percentage figure shows the number of all-conference selections from that school: Baylor (7.3-12.1); A. & M. (19.5 – 15.1); Texas (21.9 – 22.4); S. M. U. (17.0 – 14.1); T.C.U. (14.6-16.0); Rice (12.2-10.7); and Arkansas (7.3-9.5). . . . George Lawther, the son of the former famous Penn State basketball coach, John Lawther, has been selected as the new head basketball coach at Lycoming College in Williamsport, Pennsylvania. . . . Wonder if any school can boast of a better coaching record for the staff than that compiled by the Oklahoma A. & M. coaches? Get a load of this: Hank Iba, basketball, 469 wins, 143 losses; Toby Greene, baseball, 186 and 75; Ralph Higgins, track, 81 dual meet victories against only 22 losses; Art Griffith, wrestling, 78 and 7 with 4 ties; Labron Harris, golf, 97 and 16 with 6 ties. Counting Cliff Speegle's first year in football, the staff shows a winning percentage of .771. We are indebted to Otis Wile, Oklahoma A. & M.'s sharp publicity director, for the following story: Bois de Arc Beames, veteran coach at Tishomingo, Oklahoma, was attending the Oklahoma High School Coaching School. "These young coaches worry when they get no material," he said. "They work up ulcers." Presently it was time to go into the dining hall for the coaches' banquet. He waited until the meal began. Then he walked in and looked intently all around the hall. "Looking for someone?" he was asked. "Just checking on the ones drinking milk for their ulcers," the old

Indian said. "I'll schedule games with the ones drinking milk."

HERB KOPF, veteran coach who is currently serving as end coach at Brandeis, holds the distinction of being the first person to score a point after touchdown by catching a forward pass. . . . There may be other coaches who have developed more head coaches from their teams, but we wonder if Bud Wilkinson's record of having seen four of his players become head coaches in less than seven years can be topped? Jack Mitchell, Arkansas, Pete Tillman, Wichita, and Darrell Royal, Washington, played under Wilkinson six years ago, while Wade Walker, Mississippi State, graduated a year earlier. . . . Besides being one of the oldest continuous football rivalries (65th game this year) the Kansas-Missouri rivalry is probably the closest. The standings show that Kansas has won 29 to Missouri's 28 and there have been 7 ties. In addition, there is only a margin of ten points separating the two teams, Kansas having scored 743 to Missouri's 733. . . There are a number of former high school coaches who are taking a fling at college coaching this fall. Hal Sherbeck leaves a highly creditable 28-5-6 record at Missoula, Montana, High School, to join the staff at Montana State. Lee Haslinger leaves his duties

(Continued on page 56)

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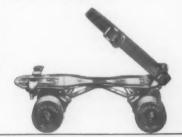
Roller skating is more fun than a barrel of monkeys, and it entertains and exercises more people in less space than any other sport.

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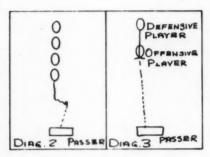
THE old saying, "The best defense is a good offense," might contain some elements of truth; nevertheless, we would not care to find ourselves in a position where we would have to rely solely upon offense when our team meets an opponent's expert forward passer. In recent years the long-gainer has frequently defeated a team which according to statistics was superior to its opponent. There is no other play in football that has the consistent long-gainer potential of the forward pass.

Recognizing this fact, it has been our policy to devote increased time and energy teaching our players to stop the long pass play. This is the foundation upon which our entire defensive setup rests. If we can stop the long one, our opponent must be content to pick up ground on the short yardage plays. Sooner or later, with the law of averages working in our favor, the opposing team is going to fumble, be penalized, miss a signal or an assignment, or make some other costly mistake which will bog down their drive. Indeed, there are occasions when they might drive to a touchdown, but if our defense can limit these drives we feel enough offensive punch can be mustered to defeat them.

We spend at least 20 minutes every day on the various elements of our pass defense. During many practices considerably more than 20 minutes are devoted to pass defense. One of the basic reasons for devoting so much time to this part of the game is that we feel the fundamental movements of pass defense are basically reaction skills. A player must have repeated these movements so often in practice that he can perform them automatically in a game. A split second's hesitation in reacting to a forward pass can spell the difference between an incompletion and a touchdown that will win the game for our

In the construction of a workable pass defense there are two elements which should receive attention. The first embodies the teaching and learn-

## Building



ing of the individual skills by the players. The second, of course, is the forging of the team scheme of pass defense.

Four individual skills which we drill upon constantly involve: 1. Catching the ball. 2. Batting the ball down. 3. Tackling the receiver. 4. Interpretive ability. We use this term to indicate a player's ability to react immediately and along a direct course to the spot where he will cross paths with a ball in flight at its destination point.

The following drills are used in teaching the individual pass defense skills:

Diagram 1 shows our running backward drill. We have the players line up in a mass formation and react to the hand movements of the coach who is facing them. The players must never take their eyes off the coach just as they must never turn their backs or take their eyes off a forward passer. When the coach waves back, they move backward as swiftly as possible; if the coach waves left or right, they change direction and respond accordingly. We stress the fact that the players must never turn around when changing direction but must always face the coach or the

Running at the ball either to catch it or bat it down is shown in Diagram 2.

A file is formed, or more than one file depending on the number of players, and the players run at one-half speed toward the passer who is 15 yards away.

The passer throws to all spots-directly at the player, low, high, wide

to either side; and the advancing player seeks to react to the ball.

When a player is batting the ball down, we insist that he not merely knock the ball away; he must drive it down into the ground with both hands if possible. Obviously, our opponent is given no second chance for pass receiving heroics.

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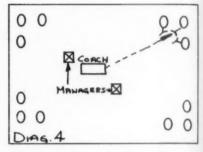
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Our players are drilled to go to one knee when they are trying to in-



tercept a pass that has been thrown at their shoe tops and to dig it out first baseman style. It is true that the ball will be blown dead right there, but we feel it is a safer way to make sure it is our ball.

A tipping drill is used to practice interception from deflected balls. This drill is run exactly like the one just described except that a second player follows about four yards behind the first player who runs toward the passer. The first player is instructed to deflect the ball into the air, and it is the task of the follow-up man to react, realign his course, and seek to pick the ball out of the air before it hits the ground. This drill provides a game-like setup and has resulted in some spectacular interceptions from deflected balls.

Going over the top to bat the ball down is the drill which is shown in Diagram 3. The formation is the same as that used in the tipping drill. However, in this drill the passer is instructed to throw the ball fairly high, between the receiver's shoulders, and a distance up to 24 inches over his head. The second man attempts to play the overhead passes hard. We teach him to play the ball all the

## Pass Defense

By Marv Levy
Backfield Coach, University of New Mexico

way even though he is likely to make rough contact with the receiver. He seeks to avoid any movements which might be interpreted as pass interference. There is a fine line between interference and legitimate pass defense on any situation similar to this one. We honestly feel that a drill such as this one helps to keep our boys from committing pass interference, since they are practicing, in a controlled situation, how to go after the ball while trying to avoid interference.

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When the ball is not thrown high enough for the defender to bat it down, he is instructed to meet the receiver with a firm shoulder between the receiver's shoulder blades just as the ball arrives. When properly and forcefully timed, this is an extremely all try to catch it. This is a drill which serves to separate the timid defenders from the more aggressive ones. One or two managers should be working with the coach to catch the returned balls in order to keep the drill running most effectively.

These individual drills are worked upon briefly, but frequently, throughout the season. A great deal more time is devoted to them during preseason and early season practices, but they are not neglected as the season progresses.

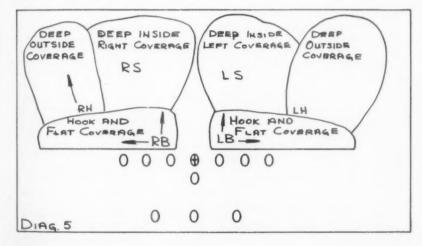
Before outlining our team pass defense drills it would be well to explain the theory and the type of pass defense which we use. We play a pure zone defense based on many of the principles used by Oklahoma's brilliant coach, Bud Wilkinson. Our 1. Lateral position of the ball on the field where it is placed in play from scrimmage. If our left safety sees that the ball is resting upon the hash mark on his side of the field, then his zone is overbalanced to his own inside since there is much more territory that must be covered inside than outside. The sideline will be helping him on his outside.

In this situation the problem for our right safety is exactly reversed since there is a great deal of open territory to his outside. Thus, he must favor the zone toward the open field. By so doing he leaves himself a bit more vulnerable inside, but the compensating movements of the left safety as just explained provide a margin of insurance.

In order to develop a knowledge of what to do in a game situation so that they will react to this setup, our players always practice team pass defense on a marked field. In executing this drill the ball is placed at a different lateral spot on the field for each pass play.

2. Maintenance of the same straight line between the defender and the passer until the ball is in the air. This point is extremely important if the zone principle is to be maintained. One player who fails to adhere to this principle can cause a disastrous hole to appear in the pass defense umbrella.

We assume that the passer is the (Continued on page 52)

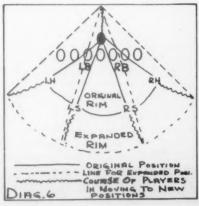


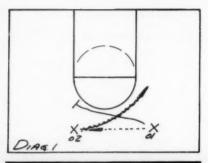
effective maneuver to use in jarring the receiver to the extent that he is unable to hold on to the ball.

Diagram 4 shows our fighting for the ball drill. Players are placed in groups of three, triangular fashion, about 15 yards from the coach who serves as the passer. The players are approximately three yards from each other with the center player in the triangle being one and one-half yards farther from the coach than the others. Then the coach throws the ball into the midst of the players and they

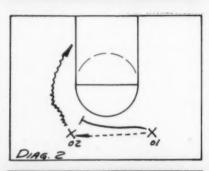
secondary is lined up in umbrella fashion and the players have zone coverages on drop back passes as indicated in Diagram 5. We have our linebackers play one and one-half yards off the line of scrimmage. The two halfbacks play two and one-half yards wide and two and one-half yards deep, and the two safety men play head-on the offensive ends and nine yards deep.

In covering his zone there are two things a player must keep in mind constantly.

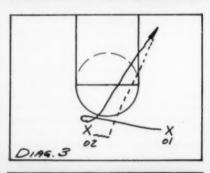




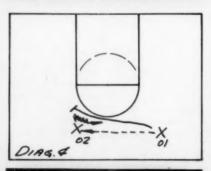
In the play shown in Diagram 1, 01 passes to 92 and screens for him. Then 02 cuts off the screen.



As shown in Diagram 2, 01 passes to 02, and screens as he did in the play shown in Diagram 1. 02 uses a cutaway.



In the play shown in Diagram 3, 01 passes to 02 and goes for a screen as he did in Diagrams 1 and 2. Then he ralls and cuts for the goal for a return pass from 02.



As shown in Diagram 4, 01 passes to 02 and screens. 02 takes to his left, comes behind, and shoots over the screen set by 01.

### The Guard

#### Basketball's Quarterback

By James W. Adkisson

Basketball Coach, N. R. Crozier Technical High School, Dallas, Texas

BASKETBALL, when played properly, is a game of speed, skill, and deception. Its appeal to the spectators is due largely to the improved style of play that has come about during the last ten years. With fast breaks, pressing defenses, rapid passing, strong rebounding, and improved shooting, it is no wonder that scores have mounted beyond all expectations. Because of this rapid-fire type of play the careful selection of personnel has become a must. Today a coach cannot select his squad on the basis of height alone. The candidate who has quick reflexes and is mentally alert, especially under pressure, will certainly have to be given consideration regardless of his

Coaches generally depend upon one or two players to set up their play patterns. If most plays involve the pivot man, either as a screener or a passer, he serves as the playmaker.

At Crozier Tech we hold the guards responsible for giving our boys a good start. They are drilled on checking the defense to determine which play has the best chance of succeeding against the type of defense that is being used by the opponents. We want our guards to take pride in the fact that a certain play was initiated because a weakness was noted in the defense. The guard must recognize how his post man is being defensed and then set in motion a play that will most likely lead to a good shot at the goal. If the opponents are using a full-court press, the guard should be aware of it and alert his team immediately in order to combat this defensive maneuver.

Because so many high school teams use some form of zone defense, it is necessary that the guards know the type of defense that is being used. Then, on a given signal, they should start an offensive play which should at least result in an unhurried shot. Too often high school teams use the same offense throughout a game regardless of the pattern of defense being used by the opponents.

Coaches should spend a portion of every practice emphasizing to each player the importance of finding the individual weaknesses of his oppo-

nent. This information should be given to the coach and to the other members of the team, especially the guards, as soon as possible, so they can capitalize on the weaknesses. When an opponent is sagging off too far, he will permit an easy shot at the goal. Perhaps he is an eager beaver who is trying to intercept each pass. Playing in this manner leaves him vulnerable for a cut behind and a lay-up shot. If the offensive team fails to take advantage of the mistakes made by the defense, it is not making the most of its opportunities. The guards should recognize these defensive errors and direct the offensive play where it has the best chance of T fe

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Since the guard is in the most favorable position to see the defense, as well as his own teammates, he is afforded a better opportunity for correct play selection. The guards should be coached not to watch the ball as they dribble, so they will be alert for a mistake on the part of the defense. They should know when to pass and when not to pass. When they have the ball, the guards should study the defense and catalog the mental as well as physical mistakes of the defensive players. Proper use of this knowledge will provide numerous scoring opportunities and possibly a victory.

Hard work, considerable repetition, and many scrimmages are necessary in order to teach the guards, who are basketball's quarterbacks, to finesse the defense out of position. However, a coach cannot spend his time to better advantage. If he is fortunate enough to discover a few quarterbacks or playmakers who will give his plays the advantage of a good start, the coach will have enhanced his chances of winning his share of the games.

We do not wish to leave the impression that height in the case of a basketball player is not of the greatest importance. It certainly is. However, a great deal of attention should be devoted to including at least two players on the team who are mentally alert, know why play patterns are a necessary part of offensive team play, and who make every effort to give their

(Continued on page 57)

A GOOD basketball team has a strong offensive rebounding game. This element not only helps the offense, but also lightens the load on the defense. It can affect the opponent mentally, physically, and tactically.

When a team is deficient in rebounding skill and is in the one-shot category, it is consigned to mediocrity or worse. This type of team places the pressure upon itself and its only hope of success lies in better-than average shooting. It must be hot to stay in the game. As a rule, a team that does not have a strong rebounding game will lack the extra punch and consistency of a steady winner.

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On the other hand, a team that has the initiative, skill, and stamina to rebound offensively in effective fashion for an entire game is in a position to exploit any of the following possibilities of the rebound attack. game, will often crack the opponent. When a team is recovering its missed shots consistently and maintaining its offense for seemingly long periods of time the opponent can often be demoralized. A team that is unable to start its fast break off the board due to aggressive offensive rebounding will undoubtedly attain a feeling of frustration. Effective offensive rebounding seems to strike at the very heart of the opposing team's confidence.

4. Physical Effect on Opponent. When a team has the stamina to rebound on both boards for an entire game many opponents can be defeated. Of course, the opponent has no alternative except to match this re-

game is frequently due to the fact that they are jumped out.

5. Supplement to the Set Shot. On occasion, the defense will retreat and consolidate, leaving the offense no alternative except to shoot over it. It is a calculated risk taken by the defense which deliberately forces the offense to resort to the lowest percentage shot in basketball. This is a critical situation for the offense and the only recourse is to swing the odds back to its favor by adding a vigorous, effective rebound game to the outside shooting. Inability to carry out this offensive rebounding attack will give the opponents a tremendous advantage unless the quality of the outside shooting is phenomenally high.

6. Offsetting the Opposing Team's Height. When opposed by a team with a height advantage, many coaches discard all thoughts of an intensive rebounding attack. However, a vigorous

## The card all the bounding at Follow-Up Game

By Robert G. Dell
Basketball Coach,
Weirsdale, Florida, High School

1. Scoring Factor. Offensive ability plus height can make the tip shot a potent factor in a team's offense. This might be termed the power game. While no careless shots are taken, the general idea of shooting and piling in prevails. There is no penalty attached to a missed shot from the floor in that such a shot is merely putting the ball in a location favorable to the offense. A team that is qualified to play this type of game, and also has reasonably good shooting from the floor, can be a most formidable opponent.

2. Possession Factor. Occasionally the high caliber of an opposing team's offense may dictate the use of a possession game. The purpose is to stay on the offense as much as possible, thus decreasing the offensive time of the opposing team and limiting its scoring attempts. If this ball-control game can be linked with a consistent rebounding attack featuring possession rebounding, the ball can be brought out after missed shots and the offense can be renewed. By playing in this manner a team can remain on the offense for much longer periods than usual. This is the possession game at its best and the overall effect on a high-scoring offensive-minded opponent can be devastating.

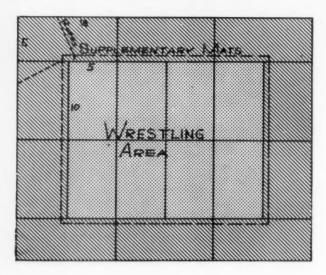
3. Psychological Effect on Opponent. Successful offensive rebounding has a powerful mental impact upon the defensive team. A successful tip shot or two, in a closely contested bounding effort or suffer in the score. If the opponent is lacking in stamina, it will be only a matter of time before this team breaks due to fatigue. The start of fatigue will be indicated not only by a decrease in jumping effectiveness, but also by a drop in general playing skills. It is significant that shooting accuracy is the first element to suffer at the onset of fatigue. The familiar occurrence of a team losing its shooting touch in a hard-fought

ROBERT DELL recently concluded 22 years of coaching basketball at Melrose, Bronson, Trenton, and Weirsdale, Florida, High Schools. During that time he never had a losing season, winning 80 per cent of the games played. Only in one game played by one of his teams did the opposition score more than 50 points, and even more remarkable is the fact that he coached for 14 years before an opposing team scored 40 points against one of his teams.

offensive rebounding effort accenting the tip shot is a most effective method for cutting a taller team down to size. This shot is made possible by a height advantage inherent in the tip shot technique as opposed to the usual defensive technique in rebounding for possession. In executing the tip shot the ball is contacted on its under surface with the tips of the shooter's fingers. Ordinarily, the defensive rebounder grasps the ball with his hands at the sides. This means approximately a six-inch height advantage for the offensive rebounder. When viewed in this light, there should be nothing remarkable about a 5 foot, 11 inch, player tip shooting successfully over a 6 foot, 3 inch, defensive player. The only qualification is the possession of sufficient stamina to make this type of rebounding a continued effort, not a sporadic affair.

7. Fast Break Defense. Some coaches who are awed by an opposing team's fast break attack curtail their own team's offensive rebounding in an effort to add down-court strength. Probably this is the poorest move that could be made. Actually, the bluff of the opposing fast break has served to eliminate the offensive team's follow up game and to insure, for the opponent, the unhindered launching of its fast break efforts.

The most effective fast break defense hinges largely upon a full force (Continued on page 55)



A QUESTION that generally arises in the minds of those who plan to institute wrestling in their interscholastic athletic program is, "What facilities and equipment are needed?"

Quite naturally, the extent of facilities and the amount of equipment will be determined by the budget. Since the amount of money available will vary with the school, we will present the ideal as well as the minimum in facilities and equipment that will be needed to field a wrestling team.

The Wrestling Room. Ideally, a wrestling room should be light, well-ventilated, and large enough to accommodate a full-size wrestling mat. Some writers on the subject maintain that each man should have approximately 40 to 50 square feet of space. In other words, a room 40 to 50 feet square would be adequate for 40 to 50 wrestlers. There should be no obstructions such as pillars or radiators that are not padded. If the wrestling mat itself comes closer than five feet to a wall, mats should be hung on the wall to a height of five feet.

For the school without such an ideal room, some of the areas that can

be used are: the auditorium stage, the cafeteria, a classroom, an old storeroom, and a hall. In fact, any clear floor space may be used if sufficient protection from walls and obstructions is provided. At one time we used an empty basement storeroom in which only six 5' x 10' mats could be placed.

Naturally, when the wrestling room is used primarily for other purposes, the mats cannot be left down but must be removed after every practice. The use of the 5' x 10' mats will make this chore much easier. Most boys like to show their strength by lifting a tightly rolled mat to their shoulder and walking off with it. Mat trucks or dollies will facilitate handling and storing.

Mats. The mats are the biggest item of equipment. A  $5' \times 10'$  mat is the most convenient size to handle and is useful for other activities as well. They cannot be less than two inches thick.

Although the rule book states that the wrestling area of the mat shall not be less than 24 feet square, high schools use a 20-foot square area and some use less. Whatever the size of the wrestling area, 5-foot supplementary mats should be placed around it to prevent the contestants from hitting the hard floor. In other words, when the number of mats is limited, only the minimum should be used for the wrestling area itself, allowing enough room for the necessary supplementary mats.

The accompanying diagram will explain the layout of a wrestling mat and show the number of mats necessary.

All mats must be held together securely to prevent undue exposure of the hard floor surface. The wrestling area may consist of one 20' x 20' mat which insures a smooth, safe wrestling area. In our opinion, the best technique for holding the supplementary mats in place and the mat cover taut is to let the excess portion of the cover lie under the supplementary mats and rope it securely to the outer handles of the mats, as indicated by the dotted lines in the diagram.

Mat Cover. The cover should be large enough to extend at least one foot beyond the wrestling area on all four sides. For example, a 20-foot wrestling area would require a cover 22 feet square. It may be made of moleskin, canton flannel, rubber or plastic. Although plastic is the most expensive, it is the most popular because it is durable, easy to keep clean and sanitary, will not cause skin burns, and provides good traction for the wrestlers.

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Grommets should be spaced at least every five feet around the edge for securing purposes. A circle ten feet in diameter with an arrow at the center at least twelve inches long should be painted in the middle of the cover. The circle designates the area within which the wrestlers must be whenever the match is started or resumed. The arrow designates the spot and direction wrestlers are to take in the referee's position. All lines should be two inches wide.

Uniform. The ideal uniform for the wrestler consists of a pair of fulllength wrestling tights, close-fitting trunks, wrestling shoes which reach above the ankle and are heelless, a sleeveless shirt fastening at the crotch, and a robe. However, we have seen

(Continued on page 58)

## **Essentials for Wrestling**

By Mearl H. Greene
Physical Education Department, St. Bonaventure University

## Material Short?

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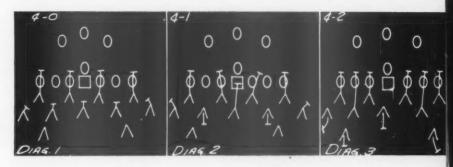
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## Try the 4-5 Defense

By Paul E. Massey

Football Coach, Haddon Heights, New Jersey, High School

WE used the 4-5 defense mainly because of our material shortage. Undoubtedly, the majority of coaches will agree that material is the most important asset to a good team. However, a great deal can be done with whatever material is at hand. For example, we were confronted with the situation of small, nonaggressive ends; heavy, slow-moving tackles; small, quick, agile guards; one-way centers; and very small backs. This type of material can make for a very difficult situation. We could have used any of a number of offenses which are widely known, but we decided to try something out of the ordinary-the 4-5 defense.

Before going any further, let us be sure we agree that most coaches play game situations according to the book. We are aware that it is mighty hard to outguess a radical, so we will go along on the assumption that he

will outguess himself.

Our personnel assignments, depending on ability, are as follows: Defensive Guards — the two largest men. Defensive Ends — quick, agile guards. Corner Backers — speediest,

best tackling backs. Inside Backers — largest agile boys available. Middle Backers — toughest belters. Twin Safeties — smartest, tallest backs.

The different 4-5 defenses are explained in the accompanying diagrams. To avoid confusion, no plays in the 4-0 series are used in our offense. In the defensive huddle the signal caller might say four-two or any of five other variations.

On defense 4-0 (Diagram 1), the

On defense 4-0 (Diagram 1), the line hits and drifts with the ball. This is a good defense to use in the game if your team is in the lead. It is also an excellent defense for combating the screen pass and should be used when the signal caller is in doubt. We attempt to teach our defensive quarterback to call his signals with confidence.

Diagram 2 shows defense 4-1 in which the line penetrates; the middle backer-up crashes over center anticipating a quick pass; the ends hold up the opposing ends; the guards veer out; and the inside backers hold. We feel this defense pressures the quarterback enough to stop delayed faking and jump passes.

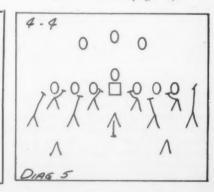
All of the linemen and the inside backers put pressure on the passer, defense 4-2, (Diagram 3). We also get deep coverage with the 4-2. If the offense runs, we are still protected with the one-on-one movement. By holding up the ends we give our corner backers-up time to adjust.

If they feel that a dive or veer play is coming, our players use the 4-3 defense as shown in Diagram 4. Our middle backer-up protects the guards' inside so they are free to fill only one hole. Our ends and inside backers-up cover the veer, while the corner backers-up cover anything wide. This defense has also worked nicely against the outside belly series.

Each man has a gap responsibility. Defense 4-4 (Diagram 5) is used primarily to combat the wedge and full-back counter series. Our defensive quarterback is cautioned never to call this defense if he has the slightest doubt regarding the coming play. This is the only time the ends are released.

On first down and on short yardage situations we like to use the de(Continued on page 60)

PAUL MASSEY saw his playing career interrupted by the war. He played at Pittsburgh and Maryland, graduating from the latter. Before accepting his present position this summer he coached at Charlotte Hall Military Academy, Palmyra, New Jersey, High School, and Needham Broughton High School in Raleigh, North Carolina.



## **Basketball** Curriculum

THE story is told of the high school varsity basketball coach whose team, year after year, was the league champion or at least a contender for the title. When asked the reason for his continued success, he replied that he, unlike most other coaches, had a continuous stream of material from his physical education classes because he taught the boys how to play basket-

Whether or not this incident is true, it presents a point that is often overlooked in the physical education program, and that is, to play the game and to be taught how to play, have different results and outcomes on the realization of the potentialities of the individual student.

In the first, he plays, increasing his ability in a haphazard manner, improving as he can by copying from others, and often as not, developing bad habits. As a result, little knowledge as to the correct methods and techniques in the art of playing basketball are learned.

When taught the game, each boy in the class has the opportunity to learn to the best of his ability the fundamental skills of the game under expert instruction and supervision. Also, from previous experience, it has been observed that the great majority of students appreciate the opportunity to learn and improve, and that they will actually look forward to the next instructional basketball session with enthusiasm and eagerness.

With the idea in mind that each student should be afforded the opportunity to learn the skills and to appreciate how the game is played, a basketball curriculum is offered for use in junior and senior high schools and in elementary activity classes at the college level. This course of study covers the essential phases of the game for both individual and team play.

The primary purpose of such a course is to obtain a knowledge of basketball and to develop skills in the playing of the game. The knowledge acquired will enable the students to better appreciate and understand basketball, either while watching or participating. Developing skills while playing the game will enable them to enjoy playing basketball at a higher

level of ability so that each, if he so desires, can participate at his level of competition, either on an intramural, recreational or interschool basis.

The objectives of a basketball course vary as to the instructor and his philosophy, but should include such items as team play, the will to win, aggressiveness, physical conditioning, and sportsmanship. Each item should be stressed continually, weaknesses should be corrected, and strong points complimented. There should be a discussion of these objectives with the class during the orientation period and whenever an

FRANKLIN LINDEBURG graduated from California in 1942 and earned his master's and doctor's degrees at that institution. He coached at Santa Cruz, California, High School, for five years before becoming coach at the Riverside branch of the University of California in 1954.

incident occurs where one can be reemphasized. Time should be taken to compliment the boy on his good sportsmanship; indicate how team play brought about success to a squad; or show how aggressiveness paid off in a player gaining control of the ball. Every day presents numerous opportunities through natural incidents to bring forth the objectives. The instructor should take advantage of the opportunity while it exists, and the results will soon become obvious in the play and conduct of the players.

In general, this course of study progresses gradually from the basic fundamentals to the more complicated and complex parts of basketball. There are 30 separate units in this plan with the idea in mind that each contains sufficient material for a 20 to 35 minute class period. These 30

class sessions easily fit a physical education program that is organized on the six-week block basis. It also fits a program that alternates activities, and could be offered twice a week for 15 weeks. To shorten or lengthen the course of study, the individual instructor can spend less or more time, respectively, on the round robin tournament or spend less or more time on the individual phases of the game that are deemed more or less important to the particular class.

The instructor should emphasize the various phases of the curriculum according to the ability and knowledge of the class. Fundamental skills should be repeated as review and warm-up drills throughout the course as should other aspects of the sport that are more complicated and more difficult to comprehend and master. Each instructor will have to be his own judge and note after each class the relative success or failures of the day and then plan the next day accordingly.

Within the course of study are items such as team offense and team defense in which there are numerous systems and methods as used by various coaches throughout the country or even particular systems which are the favorite of the individual coach. It is recommended that simple basic systems of offense and defense be taught, particularly to the young student of the game, so that when playing and learning the fundamentals, the boy will easily comprehend and absorb what is offered. Whenever there is a scrimmage or a game within the class, a man-for-man defense should be required. This procedure is followed until the class has been exposed to zone offenses and defenses. Even then, the particular defense used should be specified by the instructor so that there is variety, but with a purpose behind it. When the group understands the principles involved in their attack, then a choice by the students should be allowed.

No attempt is made to offer special basketball situations, such as out-ofbounds and jump ball plays. Only that which is necessary in order to play basic basketball is included.

#### Typical Daily Lesson Plan

- 1. Warm-up drill (2-3 minutes).
- 2. Review basic fundamentals (3-7
- 3. Major item for the day (10-15 (Continued on page 63)

By Franklin A. Lindeburg Basketball Coach, University of California, Riverside, California

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THE controlled interval method of distance training is only one of the many variations now popular in Europe. It was developed by the German coach, Gerschler, in the mid-1930's, and his first product was Rudolph Harbig. Later disciples have been Bartel, Bannister, Chataway, Pirie, Moens, and the three Hungarians who in the summer of 1955 set nine world distance records from 1000 to 5000 meters between them. Following this schedule does not guarantee that a given runner will become a Sandor Tharos, but he should reach his

greatest potential.

An actual example of the type of workout done under this schedule is the following, performed by the three Hungarian runners, Tharos, Tabori, and Rosagvolgyi, and witnessed and reported by the American half-miler, Tom Courtney, when he was on tour in Europe in 1955. After the three mile warm-up, they ran 5x440 yards in 55 seconds each, jogging 440 between each 440, immediately followed by 5x440 in 55 seconds each, jogging 220 between each 440, immediately followed by 5x440 in 55 seconds each, jogging 110 between each 440. No runner could hope to duplicate this distance without the two- or three-year training program that they followed prior to 1955. This example is quoted to point out the levels of endurance which can be reached, and the type of work which must be done before Americans can hope to compete with Europeans at distances from 800 meters up.

This is a controlled interval program, in that the speed with which intervals are run is closely regulated as to time and is commensurate with the individual runner's basic proven ability. He starts at a level of performance easily within his reach, and by following a rigid schedule, gradually develops both his speed and stamina as the workouts become progressively more difficult. In the final analysis of distance running speed is dependent, in part, upon the runner's basic speed, but his stamina or ability to maintain his basic speed over long distances is relatively much more important. While the schedule is described as rigid, the program, when it is set up for a given runner, is flexible. It is individually tailored to his ability, and is set up in rigid form for a month at a time, and each succeeding month it is varied according to the runner's need for shorter or longer intervals. Once the program is started, times must follow a controlled progression of improvement.

Notice the psychology of this method. Confidence is gained because

the runner is able to complete each day's assignment with what seems at first ridiculous ease, but all this time he is developing stamina. Interest is maintained as the runner sees his progress from week to week, and the program even becomes exciting and challenging to him. Incidentally, the runner becomes letter perfect at pacing since the repeated intervals are run on a track and timed with a stop watch. He learns to perform under, and ignore, fatigue. În this manner the runner loses his fear of the fast pace of competitive races, and develops his ability to maintain the steady-steady pace so necessary in modern long distance running.

Long distance running of top caliber becomes a year-round game, and consists of two parts — an eight-month period for developing speed and stamina, and a three- to four-month period of active competition. The old American system of attempting to develop stamina during the week and run competitive races on Friday or Saturday has proven itself likely to produce both mental and physical fatigue, and

more fatiguing. Each daily workout should total roughly eight to ten miles. Perhaps this figure should be scaled down for younger or less mature men, and it certainly should be reduced for high school runners, with perhaps an additional day or two of rest.

The daily workout is divided into the following three phases:

1. Three miles of jogging on the grass as a warm-up. The middle mile should be run at a good stride, and the first and third at an easy pace.

2. Interval running, with the total distance amounting to four to six kilometers. Five kilometers equals three miles. Each interval is accurately timed and recorded. The runner walks and rests between intervals.

3. Two to three miles of easy jogging and running to taper off. This jogging should be done on grass or on a soft, springy surface, and should bring the day's distance to the desired

If desired, the runner may combine phases 2 and 3 by doing easy jogging between intervals, that is run 440, jog 440, run 440, jog 440, etc. Many dis-

## The Controlled Interval Method of Distance Training

By Dr. John K. Cherry and Walter Boehm

fails to develop the required amount of stamina. To compete on an international level, present-day Americans are going to have to train year-around.

The training program should begin in July, immediately following the past track season, during which time the runner has determined his best times at 200, 300, 400, 500, 600, 1000, and 2500 meters or their equivalent in yards.

The general pattern is as follows: When training, a runner should work daily and take only two to four days of rest per month. An occasional day of relative rest, consisting of one-half to an hour of jogging on the grass, may be inserted during the later months of the program as the intervals become faster and the workouts

tance runners prefer this method. Otherwise, they may walk between intervals, taking three to four minutes between 440's and shorter, four to six minutes up to 660, eight to ten minutes between 1000's, and ten to twenty minutes between 2500 meter runs. If jogging, the same amount of time is taken. As the schedule progresses and in the case of stronger runners, the rest periods will be gradually cut down, but only to the lower limits mentioned, since the progression is not in the rest periods, or number of intervals run, but in the speed with which they are run.

The number of intervals run depends upon the length of the intervals. Total distance should approximate 5 kilometers and will occasionally

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amount to 8 to 10 kilometers, in which case phase 3 will be reduced or deleted. The length of the rest periods between intervals should be just enough to allow the man to recuperate from 80 to 90 per cent, and the tenth or last interval run should feel almost as easy as the first. Otherwise, the man is running too fast a pace to start the schedule, and will not be able to carry the load as it becomes more difficult.

The intervals performed and the whole schedule must be designed specifically for one man alone, depending on his ability and past performance, using longer or shorter intervals as needed. A schedule should be set up for two to four weeks in advance, no more or less, and followed religiously. As the runner nears the end of this training period, he and his progress are evaluated, and the next two to four weeks are planned. The only variable is the interval phase. Total distance is pre-determined, and the speed at which intervals are run is pre-determined and set for the entire eight months by the runner's performance in the preceding track season.

The accompanying chart shows several weeks of early season work performed by a runner of about 4:12 minute mile ability who was training for 5000 meters. Only phases 2 and 3 are described, and it must be remembered that each workout was preceded by a 5 kilometer warm-up.

If a school is competing in a crosscountry season, meets should be run on Friday or Saturday just as another workout. One day of rest should be taken prior to the meet and there should be one day of light jogging on the grass after the race. Thus, crosscountry races may be included in the training schedule, but must be run for fun only, and the interval training should be continued just as if there were no competition. The spirit of competition and the pressure of allout effort should be reserved for the track season, with the other eight months used only for development of the runner's muscles, heart, lungs, and mental attitude. Incidentally, the runner who follows this schedule will toe the mark for the first cross-country race in far better condition than ever before.

Times for intervals are calculated as follows:

Distance is the interval run. We used the French schedule which is in the metric system for convenience. The 200, 300, 400, 500, and 600 meters can be run as 220, 330, 440, 550, and 660 yards. Two hundred and fifty meters are roughly equivalent to 275 yards. These can be used directly without loss of accuracy. One thousand meters may be run as 1100 yards or two and one-half laps of a 440 track.

Twenty-five hundred meters are six and one-quarter laps, or may be run as one and one-half miles with allowance for the 110 yards short.

These distances are not run in the months of training from July through February, due to the fast pace at 200 meters, and because of the great fatigue produced by running long intervals at near maximum pace.

Progression is the number of seconds that a runner improves his time each month. For example, at 500 meters, time is improved 3 seconds per month over the first four months, and then 2 seconds per month over the last four. This improvement should be a gradual progression, because at 2500 meters the 12 seconds per month is broken into a 3 seconds per week improvement.

The eight-month schedule, shown in the accompanying chart, should begin at the end of the track season, and carry through to the start of the next competitive season. The numbers below each month indicate how many seconds should be added to the run-

Distance	Progressio	on July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
200	1	8-7	7-6	6-5	5-4	4-3	3-2	2-1	***
250	1	11-10	10-9	9-8	8-7	. 7-6	6-5	5-4	4-3
300	1	13-12	12-11	11-10	10-9	9-8	8-7	7-6	6-5
400	2	23-21	21-19	19-17	17-15	15-13	13-11	11-9	9-7
500	3/2	31-28	28-25	25-22	22-19	19-17	17-15	15-13	13-11
600	3	41-38	38-35	35-32	32-29	29-26	26-23	23-20	20-17
1000	5	60-55	55-50	50-45	45-40	40-35	35-30	30-25	***
2500	12	1:30- 1:20	1:17- 1:07	1:05- :55	52-42	40-30	28-18	***	440

Phase	Week 1	2	3	4	9	10	15
2	5x1000	2x2500	2x2500	2x2500	10x300 5x500	10x500	3x1000
3	5 K	5 K	5 K	none	5 K	5 K	½ hr. jog
2	10x500	10x500	10x400 5x200	5x200,5x 300,5x400 2x1000	10x600	5x600 1x2500	10x400 1x2500
3	5 K	5 K	4 K	none	4 K	5 K	none
2	4x2500	10x1000	5x1000	2x2500	10x400 2x1000	10x400 2x1000	2x1000 10x300
3	none	none	5 K	1/2 hr. jog	4 K	4 K	5 K
2	10x250 3x1000	10x400	4x2500	20x400	l hr. jog on grass	10x250	10x250 5x600
3	1/2 hr. jog	5 K	none	1/2 hr. jog	O	5 K	5 K
2	10x300	rest	5x400	rest	2x1000 4x500,5x	rest	1 hr. jog
3	5 K		l hr. jog		400-5 K		
2	5x1000	4x2500	3x1000 1x2500	4x2500	10x500	10x250 5x500	rest
3	5 K	walk ½ hr.		none	5 K	5 K	
2	5x600	10x300 2x1000	1x2500 5x400	10x500 2x1000	10x300	10x300 5x500	4x2500 none
3	6 K	walk 1/2 hr.	1/2 hr. jog	1/2 hr. jog	6 K	5 K	

ner's best time to determine the pace at which a given interval is run during the month in question. For example, a runner who is capable of running 400 meters in 51 seconds begins his 400 intervals at 74 seconds early in July, and by the end of July runs 400 meters in 72 seconds. In February he runs 400 meters in 60 to 58 seconds.

Times may be used as follows: Two hundred, 300, 400, and 600 meters or their yard equivalents are usually known

If the time for 500 meters is unknown, use the best 400 time, plus 30 per cent, that is the 60-second best 440 equals a 78-second 500 meters, and would start the intervals in July at 109 seconds (1:49).

In the case of 250 meters, if the time is unknown, use the best 220 time plus 7 seconds.

For 1000 meters, calculate from the (Continued on page 46)

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Here's why

Bob Cousy recommends
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The special "PF" feature helps players go full speed longer . . .

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X-RAY DIAGRAM ILLUSTRATES THE SCIENTIFIC PRINCIPLES OF "P-F"

#### BODY WEIGHT ON OUTSIDE

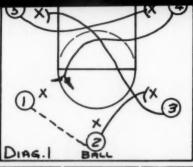
of normal foot with aid of "P-F" rigid wedge ("A" at right) helps reduce fatigue and increase comfort.



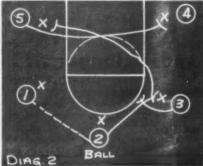
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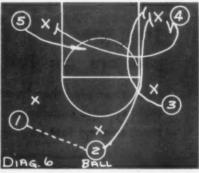


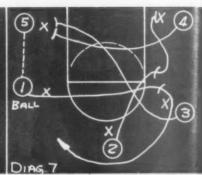
BASKETBALL SHOES are made only by Hood Rubber Company and B. F. Goodrich, Watertown, Mass.



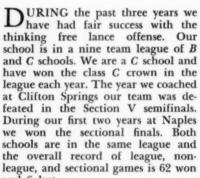
## The Thinking Free Lance Offense

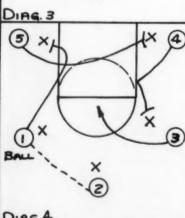






(3)





Our offense relies on five men thinking basketball all the time they are on the floor and having a reason for everything they do. They are expected to set up picks and screens continually, and then move out after their pick or screen has been used.

been used, we mean that after each pick, the picker keeps his eye on the ball. As a result, he turns his back to the defensive man who has been picked, thus placing himself in the position for a cut to the basket. He follows this procedure on every pick. However, if the switch does not occur, he comes back out to free himself for a pass and then becomes the

We set up our offense with a front man, two flankers, and two post men

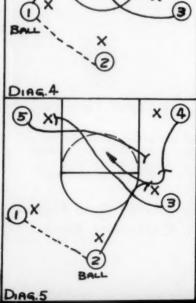
On a simple single pick, as shown in Diagram 1, 02 passes to 01 and

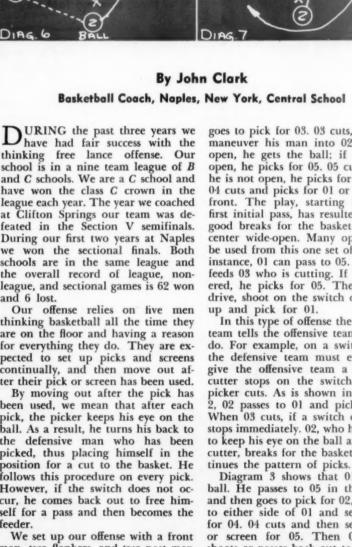
goes to pick for 03. 03 cuts, trying to maneuver his man into 02. If 03 is open, he gets the ball; if he is not open, he picks for 05. 05 cuts, and if he is not open, he picks for 04. Then 04 cuts and picks for 01 or 02 out in front. The play, starting from this first initial pass, has resulted in four good breaks for the basket with the center wide-open. Many options can be used from this one set of cuts. For instance, 01 can pass to 05. Then 05 feeds 03 who is cutting. If 03 is covered, he picks for 05. Then 05 can drive, shoot on the switch or dribble up and pick for 01.

In this type of offense the defensive team tells the offensive team what to do. For example, on a switch which the defensive team must execute or give the offensive team a shot, the cutter stops on the switch and the picker cuts. As is shown in Diagram 2, 02 passes to 01 and picks for 03. When 03 cuts, if a switch occurs, he stops immediately. 02, who has turned to keep his eye on the ball and on the cutter, breaks for the basket and con-

Diagram 3 shows that 01 has the ball. He passes to 05 in the corner, and then goes to pick for 02, who cuts to either side of 01 and sets a pick for 04. 04 cuts and then sets a pick or screen for 05. Then 05 drives, shoots or passes back out to 01. After his pick has been used, 01 moves out and then cuts.

(Continued on page 61)







#### The Wilson Jet basketball hangs on!

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## ATHLETIC JOURNAL

America's First Coaching Magazine

Vol. XXXVII

October, 1956

No. 2

Published by THE ATHLETIC JOURNAL PUBLISHING CO. 1719 Howard Street **Evanston, Illinois** 

#### A Nod to Minnesota

E VERYONE connected with athletics is concerned with the problem of increasing participation. Thus, when we see a worthwhile program, be it a school, city or state project, we like to give credit where credit is due. First, because those responsible for the program are deserving of all the praise which can be directed their way; second, it is hoped that these successful programs will serve as a goal for which others may strive.

At the state level, Minnesota has done an outstanding job in fostering athletic competition among the high schools of the state. The following statistics would seem to support our contention. Basketball, the most popular of our schoolboy sports, shows a national participation average of 95.2 per cent. In Minnesota 99 per cent of the schools have interscholastic basketball. The national figure for football is 60.9 per cent and in Minnesota 93.1 per cent of the 485 member schools play football. Nine thousand six hundred forty-nine high schools in the states belonging to the National Federation sponsor the eleven-man game. This figure represents 49.5 per cent of the total number of high schools in those states. Another 2,055 or 10.4 per cent sponsor six, seven or eightman football. In Minnesota practically 60 per cent of the high schools played eleven-man and another 34.7 per cent played the other varieties.

Minnesota is situated in an area where "spring comes late" and hence it might be expected that participation in the two spring sports, baseball and track, would not be up to par. Such is not the case. The national participation figure per school in baseball is 63.2 per cent. In Minnesota nine out of ten schools have interscholastic baseball. The national figure on track is 58.8 per cent and in Minnesota three out of four schools participate in track and field.

Among the other sports, Minnesota ranks equally high. For example, among the 32 states which sponsor cross-country, Minnesota ranks tenth. Minnesota is seventh among the 43 states sponsoring golf. Only six states have hockey and Minnesota ranks second. Fifteen states sponsor skiing and Minnesota is fourth. Minnesota ranks tenth among the 31 states sponsoring swimming and ninth among the 44 states which sponsor tennis. Minnesota is fifth among the 34 states which conduct wrestling. Lastly, Minnesota is one of the few states that sponsor gymnastics.

In regard to the breakdown of the schools according to size, Minnesota corresponds very closely with the national percentage. Nationally, 30 per cent of the schools have more than 250 students enrolled. Slightly over a third of the Minnesota schools have an enrollment of 250. According to population, Minnesota ranks eighteenth among the states.

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The Minnesota program is one which other states might well emulate, and one in which the leaders of high school athletics in Minnesota can take justifiable pride.



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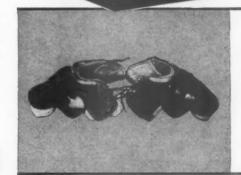
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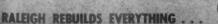


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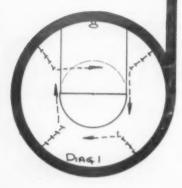


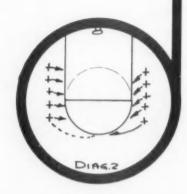






## Basketba in Three-Quarter Time







By Lee Graupman Basketball Coach, Coalinga, California, Union High School

NE of the statements often heard In regard to basketball is, "The season is too long and the players become bored with practice." Since basketball is a game where the fundamentals, and the coaching of fundamentals, are especially important, drills are a necessary evil. To counteract the loss of enthusiasm and desire, which may result from repetitious drill, coaches have added competition to drills, and they have found that changing the drills from time to time may also keep enthusiasm high.

From observation and personal experience, we have found, as have most people, that music makes a job easier to do, partly due to the rhythm, but also because it seems to speed up the circulatory system and give a feeling of exhilaration. A good example is martial music, and its use in leading

men into battle.

A number of skills in motor abilities are based on having or attaining rhythm. The use of recorded music for teaching is an application of this principle. Many of our athletics require fundamental skills which are based on rhythm and basketball is an outstanding example.

During the 1954-1955 basketball season, while coaching at Marshfield, Wisconsin, Senior High School, recorded music was used in our basketball practices as an audio-aid in promoting interest and developing the rhythm of the varsity basketball team.

At the beginning of the season music was used primarily to promote rhythm and to improve ball-handling.

AFTER graduating from La-Crosse, Wisconsin, Teachers College, Lee Graupman coached for five years in high schools. He spent last year working for his master's degree at Western State College at Gunnison, Colorado, where he served as assistant basketball coach. Graupman accepted his present position this past summer.

As the season progressed, it was used to keep interest high in running drills on fundamental weaknesses.

We found that nearly all popular fundamental drills can be run to music. Some of the best drills for early season ball-handling which we have set to music are shown and described in the accompanying diagrams.

Diagram 1 shows the squad split into four equal groups. Each player breaks out to meet the pass. In order to speed up the drill two balls should be used. The chest pass is used at the start. Then the players change to the pivot with a bounce pass. Direction should be reversed occasionally.

In the drill shown in Diagram 2 we have an equal number of players in each line. A hand-off pass should be used as a player comes to meet his man. The ball should not be handed across the player's body, and received on the side in which it is progressing. The last man breaks in for a lay-up. A bounce pass may also be used.

In order to utilize all of the floor space and keep all players busy, we (Continued on page 54)

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## Intramural Award for Quality Participation

By L. W. Stevens and Eric Hughes
Physical Education Department, University of Washington

A NEW formula for an intramural all-sports award called the Sportsmanship-Participation Trophy was put into effect at the University of Washington during the 1954-1955 school year. This formula was an outgrowth of two years of study. The plan showed immediate promise of increasing participation, improving sportsmanship, and decreasing forfeits.

There are two types of annual allsports awards in general use in intramural sports programs. These are the supremacy type for successful participation and the inspirational type for quality participation.

For many years the University of Washington awarded a trophy of the supremacy type based on a point system. This practice was discontinued just prior to World War II because it was believed that it contributed toward overemphasis on intramural sports. Since entry points were involved, organizations were under pressure to take part in all of the sports that were offered. Furthermore, organizations competing successfully for this award frequently forced their entire membership to be present as participants or spectators at each contest. The groups them-selves complained that this had an adverse effect on scholarship and requested that the program be de-emphasized. Then the dean of men took action by limiting the number of sports an organization could enter and by abolishing the supremacy

During the postwar period the administration has not imposed limits on group participation. The intramural director and his assistants are in accord, believing that an individual should have the right to enter any sport he desires. However, the Intramural Council, composed of the head of the Physical Education Department, the director of intramural sports, and the senior student manager, decided that the supremacy type award should not be reestablished, as records revealed that it was not as important a factor in the re-

duction of forfeits as was generally believed. Although organizations competing successfully for supremacy points were encouraged to keep their forfeits to a minimum, less successful groups tended to forfeit excessively.

The Intramural Council believes that an annual award is desirable if it is equally attainable by large and small groups and stresses quality rather than successful participation. Such factors as broad participation, good sportsmanship, and infrequency of forfeit are universal goals.

The intramural staff recognizes that a satisfying experience for participants on the playing area is its primary consideration, and point systems leading to awards are a refinement and a secondary consideration. To avoid increased staff load and undue emphasis on such an award, the method of keeping records already in effect was utilized.

After consulting with organization sports representatives and intramural

LEONARD STEVENS graduated from the University of Washington in 1933, and immediately joined the staff at his alma mater where he coached wrestling and freshman baseball. Following service in the navy, he has directed the intramural sports program and taught in the physical education department.

ERIC HUGHES graduated from Illinois after service in the Canadian Air Force. At Illinois he competed in track and cross-country. Then he coached hockey and directed the intramural program at Bemidji, Minnesota, Teachers College. In 1950 Hughes assumed his duties as gymnastics coach and assistant director of the intramural sports program at Washington.

student managers, the following formula was established by the Intramural Council as the basis for an award to be known as the Sportsmanship-Participation Trophy.

Provision 1. An organization must enter at least 50 per cent of the sports

offered for the year.

The requirement to enter a percentage of the total sports offered was included to encourage participation. The figure of 50 per cent was a compromise. It was believed that too high a percentage would stimulate groups to enter more activities than was justified by group interest, thus increasing forfeits. Furthermore, such a requirement would be unfair to small organizations. Too low a percentage would not accomplish the objective of increasing participation. By placing the requirement on an annual, rather than a quarterly basis, organizations were given greater latitude in selecting sports in which there was interest.

Provision 2. An organization must enter one of the team sports each quarter in which paid officials are

used.

This was included to provide the sportsmanship information required for the next provision. Officials are employed in only four intramural sports at the University of Washington - volleyball and flag football in the autumn quarter, basketball in the winter quarter, and softball in the spring quarter. It was felt that the paid officials of these team sports were the only individuals who were in a position to give a satisfactory sportsmanship appraisal. Therefore, no attempt is made to rate sports manship in other sports. Teams are rated at the end of each contest on a five-degree scale with numerical weighting as follows: excellent 5, good 4, average 3, fair 2, poor 1. The average sportsmanship is derived from these appraisals.

Provision 3. Of the organizations qualifying under provisions 1 and 2, the 25 per cent attaining the highest average sportsmanship ratings become qualified for provision 4.

This provision was included to encourage good sportsmanship. Since all organizations were given an average sportsmanship rating, ranking them was no problem. To encourage outstanding sportsmanship, only the top 25 per cent were eligible for the award. However, this percentage was made high enough to permit the inclusion of a large number of groups to give proper weighting to the forfeit factor which is included in the next provision.

(Continued on page 63)

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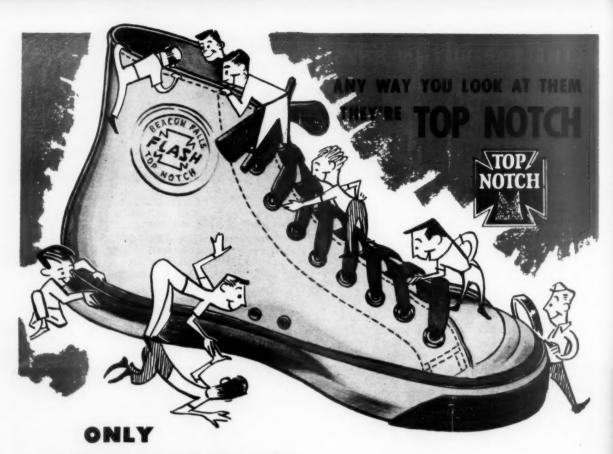
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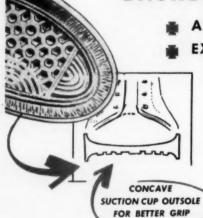
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## Individual

## **Defensive**

### **Footwork**

By Blair Gullion

Basketball Coach, Washington University, St. Louis, Missouri

BASKETBALL is a game of continually changing situations. Its smooth action is really a sequence of situations, with the offensive team operating in relation to the team defense of the opponents, and the defensive team altering and adjusting its defensive maneuvers to counter the varying offensive action of the opposition.

In recent years defensive play in basketball has been neglected in favor of all-out offensive tactics, but there is no way in which defensive play can be avoided. The elimination of the center jump and the resultant award of the ball to the opposition following a score provided a more reasonable balance of the game time in which the competing teams were on offense and on defense.

New and improved offensive techniques such as the jump shot, a nearly perfect basketball, better basketball floors, standardization of basketball backboards and goals, improved lighting, increased spectator interest, and other factors contributed to the creation of our present offensive-minded game. Many coaches in their zeal to

score 100 points per game practically eliminated the defensive aspects of the

Operating on the principle that a strong offense is the best defense, coaches overlooked the sound principle that a basket saved through sound defensive play was a basket gained.

Experienced coaches who had personnel inferior to that of their opponents emphasized defensive play to obtain a balanced offensive-defensive pattern, and played the more talented offensive teams on even terms. Some of the offense-minded coaches discovered that a sound defense was a great comfort on the nights when the offense was not functioning well.

In the past quarter of a century the objective of basketball defense has changed materially. The old objective of hold them under 20 points and win has been revised by the new and improved offensive techniques to hold them under 60 or 70 points and win, but the original defensive tenets of reducing the number of shots, forcing the opposition to take a poor shot,

Drill employing the defensive steps outlined in this article















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### Approach Step, Attack Step, Retreat Step, Slide Step

and making the opponent hurry the shot are still as sound as the proverbial new dollar.

Sound defensive play will still pay substantial dividends.

#### Mechanics of Individual Defense

Defensive footwork in basketball involves certain basic fundamentals as well as some highly specialized techniques. The basic fundamentals are utilized in such activities as guarding the player with the ball (the shooter, the dribbler, the ball-handler, etc.) and the player without the ball (the stationary player, the cutter, the knifer, etc.). Specialized techniques are designed for such activities as guarding the pivot player, shifting on screens, sliding through on screens, forcing through on screens, defensive rebounding, and others.

This article will cover only the basic fundamental footwork of basketball defense.

The mechanics of individual defensive play may be classified into three closely related and interesting categories: 1. defensive position, 2. defensive stance, and 3. defensive footwork. Defensive footwork is of special importance because it is the medium that is used for moving to initial defensive position and for adjusting defensive position in relation to the constantly changing offensive situation and because it bears a close relationship to

the establishment and alteration of defensive stance. The interaction of the three basic components of position, stance, and footwork is indicated in the following examples:

1. When the ball is gained by an opponent, each member of the defensive team must move rapidly to the most advantageous position to counter the offensive threat. Defensive footwork provides the medium by which defensive players move efficiently from the position at the conclusion of the offensive action to the proper position for initial defensive duty. Each ensuing action of the offensive players will require changes in the position of defensive players, and defensive footwork again provides the most efficient and rapid movement for each adjustment of defensive position.

2. Defensive stance may be defined as the optimum arrangement of body parts for skillful defensive action against a specific maneuver employed by an offensive player. Each ensuing movement of the offensive player may require not only a change in defensive position, but also an alteration of the defensive stance of the player. Sound basic fundamentals of footwork must permit simultaneous changes of position and stance.

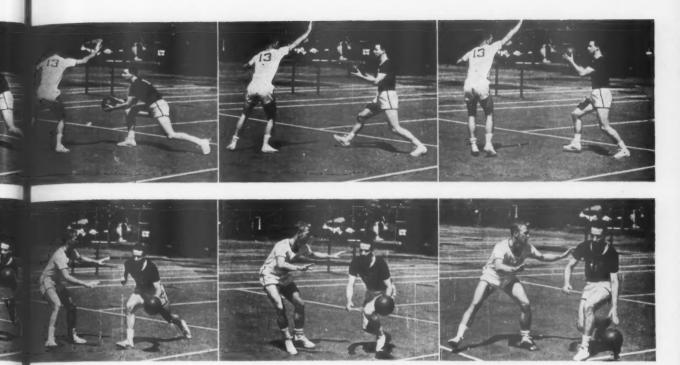
Individual defensive footwork cannot be effective when performance is of a *general* nature. Sound defensive footwork involves the performance of a variety of basic fundamental steps or movements which represent the most effective and economical manner of adjusting position and stance to meet the changing tactical situation. Since the defensive player must be prepared for offensive movement in any direction from his operating base, the complete repertoire of footwork must include sound fundamentals for action in a 360° range of movement.

#### Basic Fundamentals of Defensive Footwork

The changing tactical situation in basketball makes it imperative that the sound defensive player be extremely versatile. He must adjust from a loose position on a player who does not have the ball to a tight position on a player who has the ball. He must assume his proper role in the retreated defense or in the aggressive pressing defense system. He must move out aggressively to guard a potential shooter, yet must retreat skillfully to gain defensive position for guarding the dribble which follows the faked set shot.

Mastery of six basic fundamental steps of defensive footwork is the basis of sound individual defensive play. These six steps with a brief description of their function in defensive play are as follows:

1. The running stride is used mainly in the break from offense to estab-



lish the initial defensive position and stance.

2. The approach step is an intermediary step which is aimed to provide proper movement from the initial defensive position to the actual guarding position.

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3. The attack step is designed to move the defensive man into close guarding position to guard against a set shot or to force the offensive player into action.

4. The retreat step is utilized to facilitate defensive movement to the rear or away from the offensive player when he indicates a dribbling or cutting movement to the side of the rear foot or to the side opposite the forward foot of the defensive player.

5. The reverse retreat step is designed to facilitate defensive movement to the rear or away from the offensive player when the movement of the offensive player is to the side of or across the forward foot of the defensive man.

6. The *slide step* is utilized for maintaining the path of defensive action in its proper relationship to the path of offensive action. These steps must be executed laterally right and left and obliquely to the right and left and to the front and rear.

Diagram 1 shows the application of these basic steps of defensive footwork. The solid black footprints represent the offensive player. The shaded footprints represent the defensive player who has moved from the initial posi-











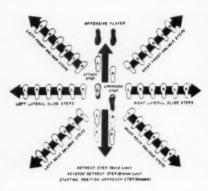


Diagram 1

tion to the approach step position. The solid-line footprints illustrate the attack step position. The retreat step position from the attack step is also shown by solid-line footprints, and the reverse retreat step is shown by the broken line. The slide steps — lateral, front oblique, and rear oblique — are shown in solid-line footprints on the appropriate directional arrows.

It is evident that the sound defensive player must function effectively in all directions. When he utilizes the attack step, he must move forward rapidly to be effective in his defensive action, but he must also be prepared for the immediate execution of the retreat and reverse retreat steps if the player attempts the dribble or passand-cut for the basket. When the retreat steps are utilized, the player must alight in position and balance for the immediate execution of the slide steps in order to maintain the proper path for continued defensive action against a changing offensive situation.

The nature of these defensive movements dictates the necessity of specific techniques for the execution of these basic footwork steps. Elements of performance of each step are described in detail in the material which follows.

#### The Running Stride

When the ball is lost to the opposition, all members of the defensive team must move to a specific position in the defensive scheme, either a pressing defense, a retreated man-for-man defense, a zone defense, or a combination of the others. The most important consideration is that each defensive player make the transition from offense to defense as rapidly as possible and that he be mentally and physically ready to carry out his duties in the defensive scheme.

In moving from offense to the initial position on defense, speed is important. If a defensive player has

more than 15 feet to run to an initial position, or if speed is of extraordinary significance, the running stride is recommended. Some coaches recommend the slide step in this situation, but that footwork is very tiring when employed too rapidly or for a considerable distance. Since the defensive man is cutting for a pre-determined position and will travel in a relatively straight path and since speed in establishing initial position is of far greater importance than shiftiness, the running stride will permit increased speed and will afford greater economy of effort.

#### The Approach Step

The approach step is a footwork movement which is designed to provide greater defensive security in the transition from the initial defensive position or from a loose or retreated defensive position to the attacking position.

Defensive players often function ineffectively in this situation and employ
faulty footwork which places them at
the mercy of the skilled offensive
player. The improperly coached or
ineffective guard will make one of
two common mistakes. He will rush
like a wild bull to the close guarding
or attack position where he is vulnerable to a feint-and-dribble or a passand-cut, or he will move to a defensive position too far away from the
offensive player to guard against the
set shot.

The approach step is designed to afford secure and rapid movement from the initial defensive position to an intermediary or preparatory point for the execution of the attack step or actual guarding action. The defensive man should move from the initial or loose guarding position through the use of the approach step to a position approximately six to nine feet from the offensive player who has the ball. The exact distance depends on the tactical situation and on the specific opponent.

As the player executes the approach step, he should assume a slightly crouched stance which affords rapid and free movement in any desired direction in both the horizontal and vertical planes. The approach step is not a guarding position, but it is a preparatory position which will permit the defensive man to attain maximum readiness for the execution of the attack, retreat or slide steps as required by the ensuing moves of the offensive player.

The defensive player must be prepared to move from the approach step position to any point on a 360° arc.

He must be able to advance, to retreat, to move laterally right and left, to advance obliquely right and left, and to retreat obliquely right and left. He must function upward in the vertical plane with an upright stance to block passes or shots; must operate downward in a vertical plane into a crouched stance to block a low pass or to guard a dribbler. In executing the approach step the defensive player should make the transition from offense to defense and establish initial defensive position in a minimum of time. When the offensive player receives the ball, the defensive man must utilize the approach step to move into the approach position. The movement is performed by a glide or slide if the distance is short, and by one or more steps and a slide or glide if the distance is greater.

The movement must be a rapid and explosive one, with the player prepared to retreat just as explosively, Both feet should leave the floor in the glide or slide, and the player should alight on the full surface of the shoe soles with his knees bent, his hips dropped, and his upper torso straight but relaxed. His feet should be spread comfortably with his toes pointing straight ahead and one foot should be from 12 to 18 inches in advance of the other. The player's arms should be ready to guard the ball in the offensive action which ensues. His weight should be borne on both feet, with a slight tendency to have more of the weight on his rear foot to facilitate execution of the retreat steps.

If the offensive player moves the ball high for the shot or if there is a defensive desire to force the offensive action, the guard will move forward under control with the attack step. If the offensive man lowers the ball from the shooting position or passes to a teammate, a retreat step is utilized. If the offensive player dribbles, a retreat step and a simultaneous slide step are used to drive him from the scoring area and toward the sidelines.

#### The Attack Step

The purpose of the attack step is to move the defensive player forward into close guarding position, especially to guard against a set shot or to force an offensive man into definite action. If the offensive player feints to shoot, the guard must move closer to him to counter the threat of the shot but must be aware of the danger of the fake shot and the dribble-by for the short shot. The attack step is the basic footwork best adapted for this defensive move.

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approach step position; and the coiled stance of the approach position allows rapid adjustment to the erect stance for guarding a shooter or to the lowered stance for guarding a dribbler. His weight is distributed equitably for action in any direction.

The transition from the approach step to the attack step is a simple action. The body of the guard is coiled, and he simply springs slightly forward from both feet, leaving the foot and lower torso alignment practically unchanged. He alights in a position from three to five feet from the offensive player on the full surface of the soles of both shoes with his balance upright or slightly to the rear. As his feet touch the floor in the new attack position, his stance is altered with an erect stance to block the shot or a low stance to combat the dribble, pass-andcut or other offensive tactic.

#### The Retreat Step

The retreat step is used by the defensive player when the offensive man moves from a set-shooting position to a ball-handling position, when he passes to a teammate or when he cuts or dribbles across or toward the side opposite the forward foot of the defensive man.

Both the retreat step and the reverse retreat step are basic footwork patterns which are designed to complement the attack step. As the defensive player utilizes the attack step to move into close quarters with his opponent to guard the set shot or to force offensive action, his security in the situation is dependent upon his ability to move away from the opponent when the subsequent offensive tactics dictate such action. Each of the retreat steps is designed to enable the defensive man to gain ground away from the offensive player and to put the defensive man in the most appropriate position for ensuing defensive duties.

The retreat step is also used in moving from attack position back to the approach position. It is used further in defensive movements to the rear or in moving to the rear for the establishment of a location which will permit the defensive man to follow the proper line of defensive action.

When the offensive player assumes a set-shooting position, the defensive player must move closer to him to counter the shot or the threat of the shot. If the offensive man moves the ball from the shooting position to the lower ball-handling position, the defensive man must use the retreat step to obtain the best position for countering the next move of the offensive man.

When the offensive man fakes a pass or dribble, the defensive man must move away from him. When he passes, the defensive player must gain position away from the offensive man to prevent the sharp cut around him and to the basket. When the dribble is used, the guard must retreat to establish the proper path to drive the dribbler to the sideline. The retreat steps afford optimum efficiency in executing these movements to the rear.

The performance of the retreat step is less intricate than that of the reverse retreat step. However, the key to efficient performance of both is the equitable carriage of the weight, the maintenance of a coiled or crouched position, and a relaxed position of the arms and shoulders which will permit the defensive player to spring

BLAIR GULLION was named to numerous all-conference and all-American teams during his playing career at Purdue. He coached at Earlham, Tennessee, Cornell, and Connecticut before accepting his present position as basketball coach and athletic director at Washington University. Gullion served for four years in the air force physical training program, is a past president of the Basketball Coaches Association, and the author of three basketball texts (see page 50). In a quarter of a century of coaching he has compiled a record of 298 wins against 173

from his forward guarding or attack position to the rear and to alight with proper balance to continue immediately his movement in relation to the path of offensive action. We might describe the retreat step as a reverse standing broad jump. In fact, practice of a reverse standing broad jump is one of the best ways to teach this footwork in the early stages of the learning process.

Action in the retreat step is a spring or bounce to the rear, and it is not a series of steps. The spring or bounce of the step involves a change of stance from the dynamic guarding stance employed in guarding the specific offensive maneuver to the initial stance posture. In executing this step, the player's hips must be dropped low, his knees must be bent, and his arms must be used to obtain the necessary body

lift. The position of his feet in alighting remains the same as at the start of the step. At the conclusion of the step, the player should have landed with an open stance in the direction in which the opponent has made his move or his feint to move. This open stance is essential to the optimum application of the subsequent slide steps used in following the path of offensive action.

#### The Reverse Retreat Step

If the offensive man dribbles or cuts across or toward the side of the forward foot of the defensive man, sound defensive footwork must enable the defensive player not only to retreat, but also to reverse his foot position so his stance on alighting is open to the side of the path of offensive action, If he does not reverse his foot position in the retreat step under such conditions, he must cross his feet or take an extra step to start the proper slide action. One of the cardinal rules of defensive footwork which has been accepted for many years - never cross the legs or feet on defense - is violated in the first instance; taking an extra step is as fatal a technical error as crossing the feet since the delay involved increases the natural advantage which the offensive man already holds over the defensive man.

The reverse retreat step combines the retreat step and the reverse of the feet in a single action. During the rear broad jump action (as in the retreat step), the defensive player performs a scissors movement with his legs and alights at the same point as he does in the retreat step with the stance open in the direction of the path of offensive action and with his body parts in sound adjustment for the immediate application of the slide step. In the performance of the reverse retreat step a slightly increased spring or body lift affords proper timing action for the complete scissors move-

This defensive situation is probably one of the most difficult in the game. Although the reverse retreat step seems difficult, it is a rather simple coordination which is performed with facility after the defensive man has mastered the fundamentals of the step. Since two steps are combined in one action, the advantages of this footwork are evident.

The function of the retreat and reverse retreat steps is to establish defensive position which will permit the rapid application of the lateral slide or oblique lateral slide steps in the actual dynamic guarding process. Both of these steps to the rear must be mas-

(Continued on page 40)

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des change provides for Pennbilt sketballs and footballs to be official for varsity play starting with the 1956 season.

1. Basketball \*(Rule 1-12) Beginning with the 1956-1957 season, a ball having a cover other than leather but meeting all other specifications is legal for any high school or Y.M.C.A. game.

\*Official basketball rules of the National Basketball Committee of the U.S. and Canada.

2. Football \*\*(Rule 1-3-1) By agreement of both teams or by conference adoption or by election of either team while on offense, a properly constructed rubber-covered football (such as PF-6) may be used in varsity play.

Official football rules of N. C. A. A. and ional Federation of State High School Association.

#### FOR YOUR BULLETIN BOARD

#### THE DRIBBLE IN BASKETBALL

### Demonstrated by BILL SEABERG Captions by BUCKY O'CONNOR, University of Iowa

When used properly, dribbling is a valuable asset in basketball. Too much dribbling will hurt team play more than any other one thing. With proper use, the dribble becomes a terrific weapon. We like to think of dribbling and ball-handling in the same breath. If one is executed efficiently, the other usually follows along. There are only a few basic fundamentals to remember in dribbling and if a player practices conscientiously he can soon become quite skillful in maneuvering the basketball.

In dribbling the basketball correctly the dribbler should stay fairly well up on the balls of his feet, his knees should be bent, and his body low and in a crouched position. His head must be up and his back fairly straight. This position gives him a good view of the court ahead. Naturally, his arms are extended and in position to tap the ball to the floor with an easy flick of the wrist. His hands are in a cupped position with the fingers fairly well spread. The ball is tapped ever so lightly with a small wrist action. Remember there is plenty of bounce in the ball and it does not take much to bring it back from the floor. A player must be sure he pushes the ball to the floor and does not bat it.

The height the ball bounces depends a great deal on the situation the player is in on the court. We like to tell a player that if he is in a congested area he should stay low and protect his dribble as much as possible with his body. In this situation the bounce should not come up more than the height of a player's knees. If a player is in the open bringing the ball up the court or on a fast break, then he should dribble higher and push the ball out ahead a little more.

There are several objections regarding the dribbling situation. We like to think that a player should never dribble the ball if he can pass to a teammate. When one player puts the ball in play by dribbling, usually his other four teammates are standing around doing nothing. One other extremely bad habit players get into is to take one quick bounce of the ball as soon as they receive a pass. This is the very worst habit a player can have as it ties him up completely in moving the ball if his teammates are closely guarded.

There are various opinions as to where and when a dribble should be used. We try to impress upon our players that there are three important times for the use of the dribble: 1. To get a player out of trouble when no teammate is open for a pass. 2. To start or maintain a fast break situation. 3. To set up or initiate a basic play pattern.



This movement is very effective in a congested area when an offensive player is trying to outmaneuver his defensive man. Naturally, the ball must be dribbled low and the player should use a technique similar to that used in the straight-away dribble. However, when he goes to make a pivot or reverse move, he must keep his feet close together as he changes direction. Keeping his feet together gives the player better body balance. One other thing he must always do is to keep the ball well protected by the body crouch. The ball should always be kept on the off side away from the defensive man.

There are two things which must be carefully guarded against in the pivot and dribble move. An unnecessary foul in the dribble can be caused by protecting the ball too well with the off hand or arm and actually stiff-arming the defensive man. The other common fault is for a player to cup or palm the ball as he reverses directions. These are bad habits and must be watched closely.

#### CHANGING HANDS AND DIRECTION

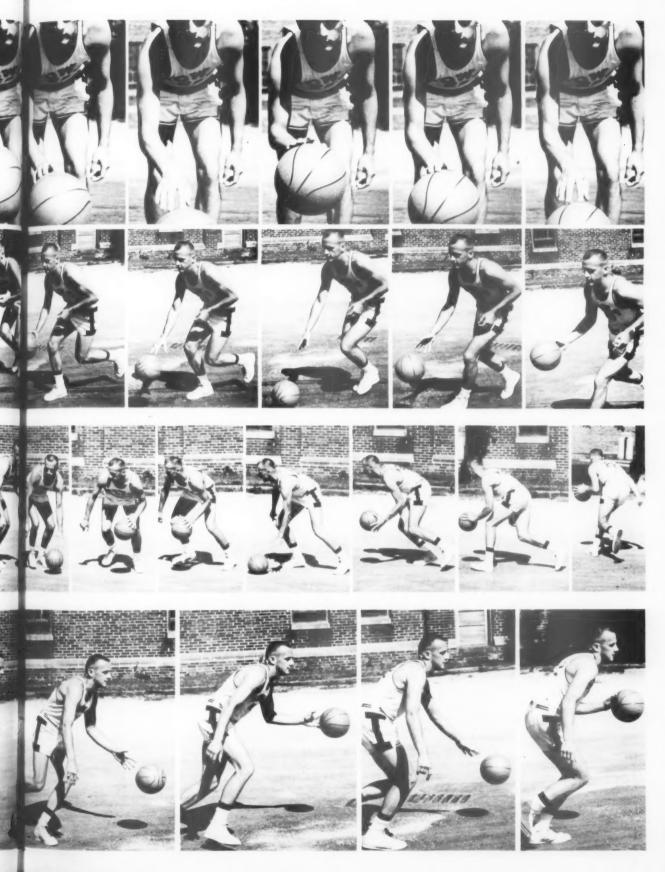
This is a very fine movement and can be accomplished both in congested areas or on the open court. Speed is not always the essential factor and again we stress the thought of dribbling and ball-handling. As the dribbler is coming down the court and wants to change direction, he should in almost every case change his dribbling hand while keeping the ball protected by his body and away from the defensive player.

The illustrations show the long bounce we encourage as the player makes his cut. He flicks the ball in the long dribble across his entire body and then steps across between his defensive man and the ball to continue the dribble with his left hand and go on his way down the court. One of the common faults we find in our players is that they may make a good change of direction and then fail to change the hand with which they are dribbling. Thus, the ball is left exposed and is easily tied up by an opponent.







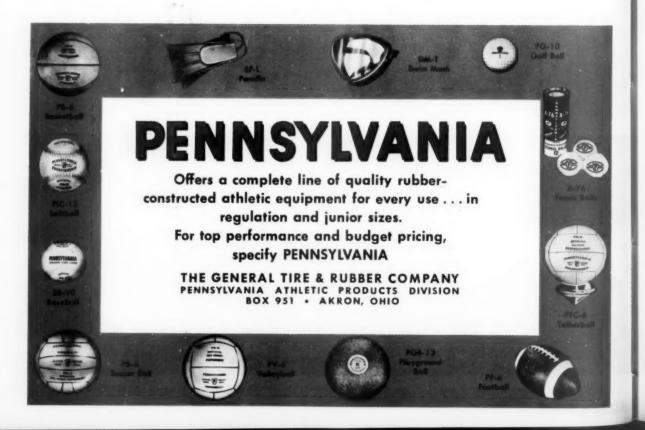


TK RNAL FEATURE

## FOR YOUR BULLETIN BOARD

This is the first of the new "For Your Bulletin Board" features. There will be four additional series during the current school year. The feature is arranged so that it may be easily removed from the Journal without damaging the magazine. Simply raise the staples on the preceding page, lift out the four-page section, and then fold back the staples. The Journal is ready for your perusal and the insert is ready to be placed on the bulletin board.

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# The Twelve Foot Lane

THE new Official Basketball Rule Book states, in part:

"Rule 1-Section 5. A free throw lane shall be marked at each end of the court. For teams of college age, both free throw lanes shall be as shown at the left of the diagram (12 foot wide lane). For teams of high school age, both free throw lanes shall be as shown at the right (6 foot wide lane)."

There is a note under Section 5

which states:

"Note-For the season of 1957-58. the 12 foot wide lane will be used

on all courts."

This year Arizona, Arkansas, Georgia, Kansas, Massachusetts, Okla-homa, Oregon, South Dakota, Utah, and Washington have approved the new 12 foot wide free throw lane for high school basketball. Approval of this rule by the above ten states means that about 4500 high schools will be making changes on their gymnasium floors. They will be removing old lines and adding new ones in order to conform with the expanded free throw lane which is required under the new rule.

By next year all of the other states will approve the rule and every high school gymnasium floor will have been

changed.

There are several companies who can make this re-marking job easier for administrators and custodians through the use of the products they manufacture.

For instance, Winfield Brooks Co., of Woburn, Mass., makes a varnish and paint remover that will do an excellent job of removing old lines.

The Hillyard Co., of St. Joseph, Mo., has a folder which shows how to re-mark the court without refinishing

the entire floor.

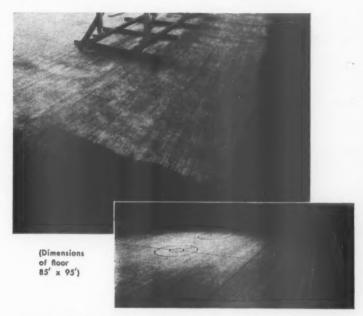
For the individual who would rather not paint new lines on the court, the Minnesota Mining and Manufacturing Co., of St. Paul, Minn., has a marking tape that can be easily applied instead of using paint.

The Huntington Laboratories, Inc., of Huntington, Ind., has a new book on mopping and maintenance which is described in the "New Items" column

of this issue.

Last year the basketball diagrams used in the Athletic Journal showed the 12 foot free throw lane only when the article was written by a college coach. This year all basketball diagrams will have the 12 foot lane.

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# The Secondary Fast Break

By Jack Nagle
Basketball Coach, Marquette University

AT ONE time or another, most coaches are vitally concerned with the use of the fast break as an offensive weapon.

There are many proven patterns for forming and executing the initial phase of the fast break. Most of these patterns are designed to fill the three lanes and advance the ball as quickly and faultlessly as possible.

However, when the initial phase of the fast break has been met adequately by the defense, it is usually considered to be unsuccessful. When a secondary fast break pattern is employed, success is usually the result.

The secondary fast break pattern is nothing more than the utilization of the trailers as offensive weapons in the attack.

In forming the secondary pattern each player is instructed to observe the following rules:

1. The taller of the two trailers cuts for the basket. He may receive a pass from a flanker or serve as a rebounder in the case of a missed shot by a teammate.

2. The other trailer immediately moves to an outside position behind the ball.

3. The remaining players form an outer perimeter and pass the ball around the horn with the open man taking the shot.

4. The weak-side flanker must pinch in as a rebounder in case a shot is attempted by a teammate but he should loosen up quickly when he is the next receiver.

The accompanying diagrams will serve to illustrate these points:

In Diagram 1, 01 has the ball since the defense has halted the initial phase of the break. The taller of the two trailers, in this case 04, has cut to the basket and takes the pass from 01. Notice how 05 has moved behind the ball.

Diagram 2 shows that 04 was not open on his cut and 01 makes a quick pass to 05 who will shoot if he is open. Rebounding is accomplished by 01, 04, and 03. Notice how 02 has loosened.

DIAG. 3

DIAG. 4

(I)

In Diagram 3, 05 was unable to shoot so he passes to 02 who shoots if he is open. Rebounding is again accomplished by 01, 04, and 03.

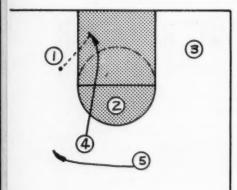
Diagram 4 shows that 02 was unable to shoot and 03, seeing that 02 is covered, loosens quickly, takes a pass from 02, and shoots if he is open. 02 may also feed 04 who swings to the ball, or he may fake and drive for the basket if the defensive man comes up hurriedly. The rebounding is again accomplished by 01, 04, and 03.

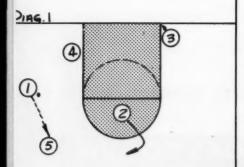
If the secondary break fails to produce a good scoring opportunity, the offense lines up in the customary set

Inasmuch as the player positions within the pattern will vary, each player must be drilled in the techniques of each position. However, the pattern is extremely simple and can be learned through drill.

We feel that the secondary break is very effective against most defenses but works particularly well against teams that initially mass their defense under the basket and then proceed to work their way out.

Naturally, we want the outside shot to be as close in as possible and our players are instructed not to loosen too far. We do not attempt the outside shot unless it is wide-open.





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JOE GIALLOMBARDO, Instructor in Physical Education and Gymnastics Coach, joined New Trier High from the University of Illinois. He served tree years in the U.S. Navy instructor of Gymnastics and ysical Education, and is one the authors of the text, ymnastics and Tumbling."

have certainly proven to me that they are built to withstand the constant use they get from New Trier students."

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## **Individual Defensive Footwork**

(Continued from page 32)

tered to a degree so that there will be no perceptible pause between the action of the step to the rear and the subsequent footwork to meet the path of action of the offensive player.

#### The Slide Steps

The lateral and the oblique lateral slide steps are the fundamental footwork for establishing the path of defensive action in its proper relationship to the path of offensive action. The lateral slide step may be executed to either the right or to the left. The oblique lateral slide steps include the following patterns or variations: front oblique right, front oblique left, rear oblique right, and rear oblique left (Diagram 1).

Two techniques for performing the slide steps are acceptable. It is believed that the majority of experienced basketball coaches favor the

second method described.

First Method. In moving to the left, the guard should step first to the left with his left foot and as his left foot reaches the floor, his right foot is brought over adjacent to the left; if another step in that direction is required, his left foot again leads, followed by the right. This procedure continues as long as the slide movement in that direction is desired.

In moving to the right, the guard should step first to the right with his right foot, and as his right foot contacts the floor his left foot is brought over adjacent to the right; if another step in that direction is required, his

> Slide Step (Second Method)

right foot leads again followed by the left. The procedure continues as long as the slide movement in that direction is desired.

Second Method. A player's feet are moved simultaneously by a hopping movement. The distance between his feet during the entire movement is approximately the same. We definitely recommend this technique for performing the lateral slide step and its variations. The player's body must be crouched or coiled slightly more in using this technique, and his arms, shoulders, and hips must be used to gain the *lift* needed in the hopping movement.

In utilizing either of the techniques described above, several basic principles of body mechanics contribute to improved performance.

1. A player's feet should be spread comfortably because too wide a spread interferes with the body lift needed for the hopping or gliding movement. 2. His feet should be perpendicular to a defensive line which parallels the path of the offensive player and at a distance of from four to nine feet from the path of the offensive player.

3. Weight should be carried on the balls of the player's feet, should be shifted from the right to the left foot or vice versa in the first method described, and it should be distributed on both feet in the second method.

4. His feet must not be crossed in this action. It is not enough to tell a player that he must not cross his feet; knowledge of proper footwork must be augmented by sufficient instruction and drill to insure sound performance.

5. The player's knees should be bent and his hips dropped, with his body in a slightly crouched or coiled position.

6. His arms should be carried slightly forward and to the sides. The height of his hands in the vertical plane should depend on the defensive situation. For example, his hands usually will be carried low in defending against a dribbler out-court and held near full extension as the threat of









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the under-basket shot is evidenced.

7. All body parts should be in the state of relaxation which is necessary to well-coordinated movement.

8. The player's head should be up, with his upper torso fairly erect, to provide the balance necessary for position changes or for a change in the defensive path to meet various offensive maneuvers.

9. His trunk should be especially flexible and relaxed to permit the twisting movement of the reverse retreat step if the offensive man reverses his path. Slowness or ineptness in performing the defensive movements to the rear — the retreat step and the reverse retreat step — will result in many of the gross errors of defensive play. Sound defensive footwork based on proper body mechanics will enable the defensive player to increase the speed of performance of the rear movements with a corresponding increase in defensive efficiency.

#### Application of Defensive Footwork

There is no specific order in which defensive footwork is used, and there

is not always a clear-cut break between one specific step and the next one. The order of execution of the footwork is dictated by the path of offensive action.

In the cycle of defensive movement from position to stance to footwork to a new position to a new stance, the action is not always separate or distinct. Ouite often the defensive player will utilize defensive footwork to move from one position to another without altering the defensive stance which he has assumed. For instance, the defensive man may use defensive footwork to approach or draw near to the offensive man who has faked a shot or has faked a movement right or left. Then he moves forward and assumes the proper stance but immediately uses a retreat step in order to meet the threat of a dribble by the offensive man. His stance as he approaches the man and his stance as he retreats are practically identical.

Initial position should be established as soon as possible. The approach step is used to place the defensive man just short of the actual

# Slide Step

(First Method)

guarding position. This step's function is to insure that the player does not lunge or over-commit himself and to enable the guard to obtain the proper stance and balance for ensuing defensive responsibilities. In situations of dire emergency and as a last resort, the defensive player must eliminate the approach step and attack in the manner which offers the greater possibility of success.

Usually, the attack step is applied in guarding against a shot, in attempting to force the offensive man to make a move, and in playing at the side of a player in a forcing defensive situation. The attack step is likened to the footwork of a clever boxer. As the boxer attempts a blow, he is always ready to recover and to retreat from the possibility of a blow in return. As the defensive man moves forward with the attack step, he is always ready for the application of the retreat or reverse retreat step.

The retreat and reverse retreat steps enable a defensive player to withdraw from the attack or direct action and relocate his position on the path of defensive action.

The lateral slide and the oblique slide steps (both front and rear) are the fundamental steps for following the path of defensive action. This footwork enables the defensive man to drive the offensive man to the sideline, to force the offensive man to the outside or to the center of the court, and to maintain the most advantageous defensive position at all times.

Precise defensive play – the exact distances which should be maintained and the risks which are involved – is related closely to the tactical situation. The strengths and weaknesses of the











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immediate opponent, the team defensive strategy, the time, the score, and many other factors must be considered

#### Coaching Defensive Footwork

Since the basic fundamentals of individual defensive footwork are the keystone to defensive efficiency, the initial step in coaching defensive play is the teaching of the six basic step of footwork. Each player must know the mechanics of performance of each step and the principles of application of each step in defensive situations.

Initial drill and instruction should be confined to the separate steps of footwork. Detail of performance should be emphasized with minimum regard for speed of performance or

effectiveness of guarding.

The second step in the coaching process is the development of speed of performance of the footwork steps. The footwork steps are organized into a pattern similar to a dance step with the player breaking to initial position, moving to the approach position, then the attack, the retreat, back to the attack, then the reverse retreat, ending with the oblique lateral slide steps for a distance of from 15 to 20 feet. This drill is similar to a dance step, and is a very effective teaching measure.

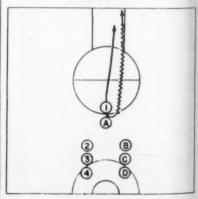
The third step in the process is the application of the footwork in the one-on-one guarding situation, as is shown in Diagram 2. Similar practice in the two-on-two and the three-on-three guarding situation should follow.

The fourth step involves the teaching of some specialized activities. Diagram 3 shows a special drill for practicing the *lateral slide step*, and Diagram 4 represents a drill that is designed for practice in moving to the initial defensive position and then performing the defensive footwork steps.

The final step in the coaching procedure is the application of the steps of footwork in the five-on-five defen-

sive situation.

Diagram 2





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ion, then the ding for Γhis d is the the is is ctice e-onlow. ach-Diafor and at is the hen vork proteps efenDevelopment of the total defensive plan — shifting, sliding, guarding the pivot, defensive rebounding, handling jump balls, countering the fast break, utilizing forcing or pressing defenses, and other activities — is facilitated and the plan is more effective when players are skilled in the fundamentals of individual defensive footwork.

Diagram 1 shows the basic steps of footwork. This diagram is taken from Techniques and Tactics of Basketball Defense, published in 1951.

The footwork drills shown in Diagrams 2, 3, and 4 and the explanation are excerpts from 100 Drills for Teaching Basketball Fundamentals, published in 1933 and revised in 1953.

Diagram 2. Defensive Footwork - One-on-One Drill.

"Offensive player A fakes a shot to draw 1 in at close range, then feigns a dribble or employs offensive footwork to evade 1. After using a series of faking movements, A will use a dribbling drive to the basket, taking a lay-in shot, a hook shot, or a jump shot if successful in freeing himself from 1. If A cannot get a good shot, he returns the ball to B who continues to drill with 2 as the defensive player. Players rotate in both the offensive and defensive lines."

Diagram 3. Defensive Footwork – Lateral Slide Step.

"The purpose of this drill is to af-

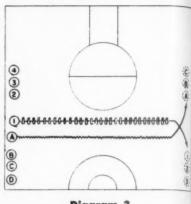


Diagram 3

ford practice in utilizing the lateral slide step to maintain proper defensive position at all times.

"Player A dribbles cross court, using a change of pace with defensive player I employing the lateral slide step. The defensive player is not permitted to slap, bat or otherwise interfere with the dribble.

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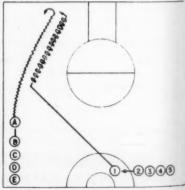
"When A reaches the opposite side of the court, he passes the ball to B B and 1 move to the positions indicated. When all offensive and defensive players have crossed the court, their offensive and defensive positions have been reversed. Player 1 become an offensive player; he dribbles to the opposite side of the court with A at the defensive man. In this way all players function on both offense and defense."

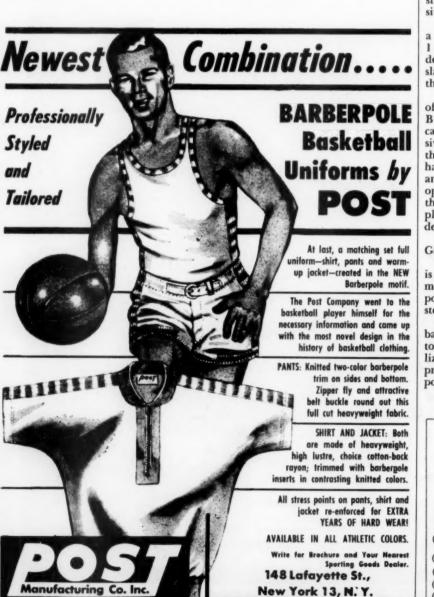
Diagram 4. Defensive Footwork-Gain Position – Use Slide Step.

"The major purpose of this drill is to require the defensive player to move fast to establish his guarding position and then to execute the slide step rapidly to maintain that position.

"Player A starts his dribble for the basket, and defensive player 1 move to establish his position and then utilize the slide step or boxer's step to prevent the dribbler from reaching a position for an under-basket shot."

### Diagram 4





for

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Sports College's Lloyd Percival Finds Injury Time Reduced With Use of Cyclotherapy® Equipment

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After having read several very favorable reports of this equipment from such eminent athletic trainers as Howard Waite of the Pittsburgh Panthers and Dr. Harrison Weaver of the St. Louis Cardinals, Director Lloyd Percival of the Sports College, Toronto, undertook his own research program.

Highlights of Director Percival's report, "Effectiveness of Cyclotherapy on Athletes," are as follows:

apy on Athletes," are as follows:
"We have found that contact
bruise injuries of all types (especially the well-known Charley
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use of Cyclotherapy. In many cases

we found that the use of this equipment cut down the time of recovery—sometimes as much as 50%. There appears to be no doubt that Cyclotherapy stimulates the circulation very effectively and thus aids the normal healing processes.

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The Pittsburgh Panthers' progressive trainer, Howard Waite substitutes Cyclotherapy for hand manipulation in giving his athletes rubdowns, as demonstrated here on tackle Eldred Kraemer (now a professional football star).



The late Dr. Harrison Weaver, (St. Louis Cardinals) used Cyclotherapy in the treatment of certain painful, incapacitating injuries.



Use of the portable Cyclotherapy cushion on ankle injury is here demonstrated by Trainer Howard Waite and ex-Pitt tackle Eldred Kraemer.

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## **Distance Running**

(Continued from page 16)

best one-half mile time, using the international scoring tables to calculate yards and/or seconds at 800 yards and add time for an additional 220 yards at the same place plus 7 or 8 seconds. Running 880 in 1:54.5 equals 7.6866 yards and/or seconds. Then 1100 yards would be 143 seconds, plus 7, or 2:30 for 1100 yards or 1000 meters. A distance runner would begin intervals at 3:30 in July, and be running them in 2:55 by the end of January. In the case of 2500 meters, simply use the one and one-half mile time, adding the indicated number of seconds, and train at one and one-half mile intervals.

Each month's schedule should be made up ahead of time and then performances are recorded as they are completed each day. All intervals are run on the track, timed accurately, and the pace should not be exceeded. The pace of any given interval should be spread evenly over the entire distance, with an attempt made to run each 200 meters in equivalent times. In a short while even the inexperienced man learns pace, and he will run all intervals remarkably close. Each interval must be timed and reported accurately to the runner as it is finished. Otherwise, the runner becomes lost as he tires, slows his pace or fears he is running too slowly and speeds his pace. A clue to success in running distances is in pacing. A runner must learn to hold a steady pace, the steady output of effort, and ignore fatigue.

This program is used for any distance runner. The only variation is in the proportions of short and long intervals, that is, the half-miler would do relatively more 200 to 400's and the six-miler relatively more 1000 to 2500's. However, both runners should perform at all intervals from 200 to 2500. Furthermore, variation should occur between the half-miler and three- or six-miler. The former will run fewer of 300 to 500's at a faster pace, while the latter will develop his ability to do 15 or 20 of these intervals at a somewhat slower pace, and, on occasion, perform only ten intervals at the maximum pace called for by the schedule. In other words, the three- or six-miler might run 15-20x400 in 68 seconds, and a few days later run 10x400 in 62 seconds as a speed workout at a time when the schedule calls for 62-second 400's.

The planning of a two- to four-

JOHN CHERRY, M.D., and Walter Boehm are two amateur track competitors who have worked with the European system of controlled interval training for distance running. They have had numerous requests for information on this system and in order to supply the information have contributed this article. Dr. Cherry is currently on duty at the March Air Force Base Hospital.

week training program in advance is the critical point and requires both objective and subjective reasoning. It is not simple nor can it follow any se rules. The schedules quoted for one runner's first to fourth, ninth and tenth, and fifteenth weeks were se lected at random for example only. The runner's performances over the past few weeks must be evaluated ob jectively, and weighed against the subjective feelings he has, or has expressed. Then the ensuing two to four weeks are planned in a manner that will meet his needs for pace or long intervals, speed or short intervals, and for rest. In any case, a projected two to four-week schedule similar to the examples previously mentioned should be planned, including the pace at which any given interval is to be run written down, and closely followed. An inexperienced runner cannot be allowed to run day-by-day, as he feels for he will overwork for a few days until his pep and enthusiasm run out Then he will become tired, underwork or become discouraged with the method and lose faith in it and in his

Days of rest are definitely needed and should be days of complete rest, or relative rest of easy jogging on soft grass. In the early months only a day is needed every two weeks or so for the pace is slow and the purpose is to develop great endurance. However, a the pace becomes more strenuous fatigue is greater and certain runner will need as much as a day of complete and a day of relative rest each week. Accumulative fatigue is an important trap which must be guarded against, and here the runner's pep. bounce or spring, his enthusiasm for the work, and his subjective feeling are the guides. An average of tes hours rest a night is a must. We mean physical rest rather than sleep. It is just as beneficial to retire to bed at an early hour and read or study for two or three hours before sleeping. It is

George Mikan, "The Mr. Basketball"

George Senesky, Head Coach, Philadelphia Warriors, NBA World Champions 1956

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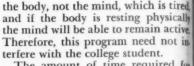
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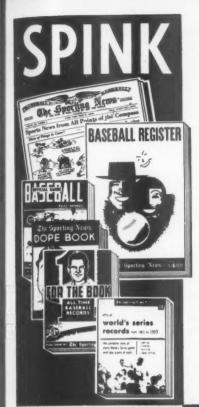
Diet is important, and should be high calorie, high protein, and high vitamin. High calorie is necessary be cause of the great energy expenditure; otherwise, protein and thereby muscle mass will be burned for energy. High protein and high vitamin are necessary because this process of developing is that of breaking down and rebuild ing the muscles used in running, en largement of the liver and heart muscle, and increasing lung capacity, The body must be furnished with the protein and vitamins used in this process. Fish, eggs, cheese, other mill products and meat, including liver each week, are an absolute necessity in the daily diet. If the diet is not ade quate in fresh fruits, vegetables, and cereals, vitamins should be taken, and probably should be used anyway, in view of the heavy work load.

Weight is a problem that takes care of itself. If the individual is overweight at the start, the hard training coupled with moderate restriction of carbohydrate foods will bring the runner to his optimum competitive weight. It is important that the runner does not lose weight past the desired point, and he should weigh himself daily. Weight loss, especially when associated with a growing sense of fatigue, indicates the need for an additional day's rest plus an increase in the daily calorie and protein intake

At the end of eight months of training, the runner is ready for his first meet in March. To this point he had had no competitive running, and the coach must see that competitive situations do not develop in practice sessions. The runner will line up for his first race in the greatest condition of his career, eager to run, and may likely return a time faster than his previous best at the peak of last year's season.

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**BLAIR GULLION** Washington Univ. St. Louis 5, Mo. ened. The runner rests one or two days before and one day after each competition, or at best, indulges in very light speed play and jogging on grass. He works only two or three days between races, depending on his own particular needs. Thus, the competitive season is reserved for giving allout effort on meet days, in sharpening and holding the stamina gained over the preceding eight months, and in rebuilding strength and desire between races. At times, complete diversion from the pressures of competition is a must

At the end of the track season the runner re-evaluates his best times, and starts again on the eight-month program. Maximum performances seem to have been obtained by the Europeans after a minimum of two and as much as four years of this year-around training. It has been proven difficult to break into the center of the time schedule of such a heavy program, and the novice is advised to be content to start at the beginning. While runners can go out on a track, and keep up with a man who has been following this method for several months on a given day's workout, or even as much as several days, it has been demonstrated that the novice very shortly develops sore feet, arches, ankles, and muscles that prevent further training, develops accumulative physical and mental fatigue or else pulls a muscle in the midst of a workout. This is a training program which must be started gradually and worked into, developing the stamina and strength of muscle and ligament necessary to bear the cruel burden imposed upon them.

Controlled interval training can be applied to any age runner, providing proper judgment is exercised. Ron Clark, the young Australian, demonstrated this by running the mile in 4:06 and the two mile in 8:56 at the tender age of 19. More important than chronological age is physical maturity, distance running having been long recognized as an old man's game. It is assumed that any young runner of college or high school age will have the benefit of an experienced, mature coach to guide him through this yearly training routine. However, even the youngest runner will benefit enormously from some form of wisely applied interval running, providing that the times are geared to his ability and the total distance to his physical maturity. Fixed total distances cannot be stated, except to say that fully mature runners have handled 8 to 10 miles daily with profit, and younger men should be scaled down from this point. The experienced runner can design

and follow his own program, but it is still helpful to have a good coach to at least collaborate and contribute the objective bit of thinking necessary to attain proper balance.

Admittedly, this is an extreme rigorous program entirely foreign to American standards. On the other side of the scales, however, are several im-

portant facts.

1. Zatopek and others have shown that the human body is capable of carrying and profiting from these work loads. The athletic heart and burned out runner seem to be myths. To date all cardiovascular and medical research indicates that the normal hear is literally immune to physical exer-

2. Results obtained by this method of training are obvious and more than adequately documented by the great revolution in distance running standards and records that have been see

over the last five years.

3. The controlled interval program gives both the coach and the runner sensible, logical point of embarkation based upon the runner's demonstrated ability. It is well for runners like Landy to run just as they feel that day, for they have already gone through some process similar to controlled interval running to attain their advanced status. The novice can neither compete with them, nor know how he should run that day.

4. The psychology of this program gives the runner a daily goal to aim for and attain, thus maintaining interest and building confidence, and may be as important as any other

given factor.

5. The runner does not have to be a recluse or a fanatic to follow this program. According to the amount of time required, it is not any more demanding than present training methods, providing time is not wasted. The average student should be able to it it into his daily schedule. While certain sacrifices are necessary, as in any training program, moderation should be the keynote in training, just as in living - moderation in diet, in rest, and in pleasures.

6. Any other objections raised merely beg the issue. The American runner can follow an interval training program on a twelve-month basis, given the desire. He did not have to choose to be a distance runner, not does he have to follow such a yearly program. The fact remains, however, and that is simply that Americans can no longer compete on equal footing with others unless they do adopt some training method such as controlled

interval running.

Let us speak a word of warning.



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The coach who applies this strenuous type of interval running to his students regardless of their disposition and inclination may well ruin as many good track men as he creates. Great care must be used in selecting a man with both the desire to excel at distance running, and the willingness to work hard to attain this goal.

In summary, as with any system, it is only as good as the men who practice it. Miracles are not to be expected. but instead, in response to two or three years of patient hard work, an improvement can be expected to a level which is dependent upon the physical and mental capacities of the men involved.

## Pass Defense

(Continued from page 7)

hub of a wheel, and that, if spokes were drawn, the outer four men on the pass defense would be in positions along the rim of the wheel. As the passer drops back, the hub moves farther from the rim and in order for the pass defenders to maintain the same straight line between themselves and the passer they must also drop back, thereby expanding the

rim of the wheel (Diagram 6). Our thinking is that the farther back a passer fades, the farther the ball must travel in the air to reach an intended receiver. Therefore, our defenders can afford to spread themselves thinner since they will have more time to react to the ball once it is in the air.

We have found that the defender who reacts well to a pass can travel about 50 per cent as fast as a forward pass in flight. Thus, if the pass must travel 30 yards to an intended receiver, our defender could con-ceivably be 15 yards from the spot where the ball will be caught and still arrive simultaneously with the

If the passer moves laterally, it is imperative that the pass defenders make an identical lateral adjustment so they continue to maintain the same straight line between themselves and the passer. If the passer moves backward and laterally simultaneously, it is still the duty of the defender to react laterally and backward himself so that the same straight line principle is observed. For example, the position of our left halfback on a roll-out pass would be as indicated in Diagram 7.

All of the outside men in the um-

MARV LEVY is a graduate of Coe College and coached at St. Louis Country Day School before returning to his alma mater as backfield coach on Dick Clausen's staff. Following Coe's outstanding record last fall Clausen was selected to handle football at New Mexico. He immediately chose Levy as his backfield

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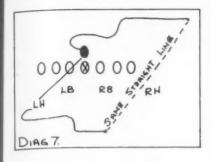
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brella are instructed to play every thing first as a pass, with just one standard exception. Any time an of fensive back starts a sweep, even though it may turn out to be a running pass, the halfback on the side toward which the play is flowing must come across quickly to turn the play inside or, if a running pass develops to put the heat on the passer.

Our reason for this exception can be explained easily. We have instructed this halfback that he had outside responsibility on all sweep in his direction. If we were to insig that he take flat coverage on the running pass play, he would have a





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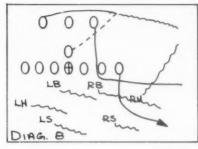
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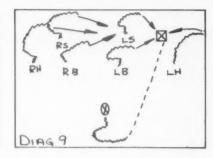
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frustrating and impossible task. In this instance the flat will be covered by the linebacker who is coming fast with the flow of the play (Diagram

One of the most difficult points for the coach in presenting zone defense to his players crops up when they seek to cover a man in their zone man-for-man. It is difficult for players to let men who are crossing in front of them alone. Nevertheless, our players must let these players run their course unmolested until the ball is in the air. Then all six members of the secondary must react to the ball with the utmost in speed and effort. We insist that all members of the secondary, regardless of how far they might be from the ball,

react immediately to it once it is in

In order to make our players passer conscious and ball conscious we often employ the pass defense drill shown in Diagram 9. Using a skeleton pass defense secondary with no receivers involved, we have a passer fade back, change direction, etc., finally releasing the ball in an effort to throw it through an open spot in the defense. The defenders, observing all principles which have been explained previously, react immediately to the ball. When this drill is executed correctly it is amazing how few passes reach the ground without a defender at least getting a hand on the ball.

Our next drill is similar except

that now we employ pass receivers. Nevertheless, our defenders follow the same basic principles they followed when there were no receivers being used. Now the defenders are given the added tasks of battling for the ball, and, upon occasion, of tackling the receivers. The receivers man run any pattern they wish, or we may have them running the patterns of our opponents for the coming game. Quite often linemen are used to run these patterns.

Of course, the next step is a full-fledged pass defense scrimmage.

As may be seen, this is a pure zone pass defense. Perhaps the only deviation from the zone principle is found in our admonition to the deep secondary man, "Follow the cardinal



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principle of pass defense-never let a man get behind you."

The other salient points in our pass defense are:

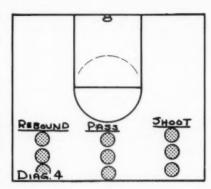
- 1. Be aggressive.
- 2. React to the ball.
- Keep the same straight line between yourself and the passer.
- 4. Play everything first as a pass. After it is apparent that a pass is not forthcoming we can forsake our pass defense responsibilities.
- 5. Good pass defense is built on constant and conscientious practice.
- 6. Give up the short one if you must but stop the long-gainer.

## Three-Quarter Time

(Continued from page 22)

have them practice a weave along a straight line, emphasizing the inside screen and the pass away from the defense (Diagram 3). This drill is good for ball-handling and conditioning.

In early season drills it is necessary to emphasize passing and to get the boys into shape. This drill accomplishes more than the old two line



drill, comprising one shooter and one rebounder-passer (Diagram 4).

Any drill that can be devised to iron out mistakes, which appear as the season progresses, can be run to music.

The best music for our purpose was readily available. We had access to the records used by the commercial department for their typing classes. These records are especially well adapted because they are set to a listed typing speed of a certain number of words per minute. If it suited our purpose, we could speed up the drill or slow it down simply by chang-

ing to a different record.

Following is a list of Decca records that became as important in our stock of equipment as our statistic charts:

Record No.	Title	Orchestra 5	pesi
77735	Stompin'	Henry Busse	32
LS 69 B	Room Only		
77734	Parade of	John Scott Trotter	27
LS 69 A	the Wooden Soldiers		
77736	China Doll	Russ Morgan	34
LS 70 A	Parade		-
77733	Tea for Two	Victor Young	26
LS 68 B			
77757	Toy Pieno	Milt Herth Tric	40
LS 75 A	Minuet		
77758	Helena	"Whoopee" John	45
LS 75 B	Polka		-
77751	Red Wagon	Count Basis	28
LS 72 A			
77756	Juzz Me	Bob Crosby	38
LS 74 B	Blues		
77755	Sweet Sue	Victor Young	37
LS 74 A			-
77753	Chansonette	Lawrence Welk	22
LS 73 A			
77754	Goodbye My	Russ Morgan	36
	Lady Love		-

Using music for basketball drills may seem to be too much work for an already overburdened coach. However, the solution is to appoint a manager who will be responsible for



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THE ATHLETIC JOURNAL

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the technical and physical end of the project. We were fortunate in having a manager who was intelligent, interested in music and basketball, and a good worker. It was due to his hard work that the experiment went so smoothly.

Carrying the use of music further, we ran our pre-game warm-up to the strains of Sweet Georgia Brown. We felt that if it was good enough for the Harlem Globe Trotters, it might also

help us.

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The suggestion was received with alacrity by the band people and made for good feeling between the two

departments.

This experiment accomplished more than we hoped. The players really enjoyed it, the fans looked forward to it and joined in by clapping their hands to the rhythm, and we believe it gave us a psychological jump on our opponents. The opponents spent a good part of their warm-up period watching our boys go through their paces and seemed a bit awed at the way they ran through drills.

Our aim in using music for basketball practice was to promote, or at least to keep interest high, and to develop rhythm. The only checks we have are personal observations, players' reactions, and third party ob-

servations.

We are firmly convinced that music did help keep interest high and did help to develop rhythm.

The players were very enthusiastic and when we held a practice without music to check their reactions, they complained and asked to have the records played.

The third party observations were from fans and the press. We received many favorable comments from spectators and several nice press

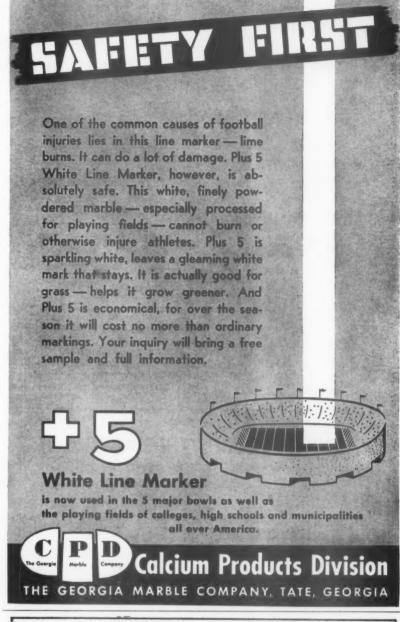
notices.

# Follow-Up Game

(Continued from page 9)

offensive rebounding attack in an effort to throttle the fast break attempt at its source. Each rebounding effort must be an all-the-way affair with its objectives approached in the following sequence: 1. Score by follow-up shots. 2. Rebound for possession. 3. Tie up the opponent who secures the ball. 4. Block, or at least hinder, the pass out.

An effective application of these tactics will soon switch the opponent's primary thought of initiating the fast break to the following immediate concerns: 1. Defend against follow-up shots. 2. Attempt to secure the re-

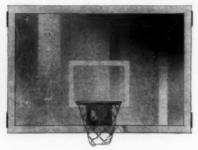




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offensive rebounding attack is to be effective consistently. Jumping is the most strenuous phase of basketball. A carefully graded conditioning program, beginning as early in the year as possible, will be necessary to provide the degree of endurance required. Rope skipping, jumping exercises, and the actual rebounding technique are the media to be used for this purpose. Adequate rest is advisable on the day or days just preceding the game to insure the full availability of the players' existing stamina. Unless the required level of endurance is achieved and maintained, the follow-up game may back-

It would seem that a coach is justified in spending whatever time is necessary to develop a strong followup game. As one of the old masters of basketball, the late Ralph Jones, wrote many years ago, No one-shot team ever won a championship.

## From Here and There

(Continued from page 4)

as line coach at Massillon, Ohio, High School, to join the staff at his alma mater, Cincinnati. John Ralston, who guided San Lorenzo, California, High School, to its conference championship last fall, joins "Pappy" Waldorf's stall

bound. 3. Protect the ball when possession is secured. 4. Try to get off an accurate pass.

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A fast break opportunity exists as such for only a few seconds. This is the Achilles heel of the fast break attack. Any disruption at this time can be fatal to it.

The coaching approach to the development of a follow-up game requires cognizance of the following two

1. The development of offensive rebounding skill requires far more time and effort than that of defensive rebounding. There is little carry-over from defensive rebounding to offensive rebounding. It is not unusual for a good defensive rebounder to be of little value on the offensive board.

Ordinarily, the offensive player is located at a greater distance from the basket than is the defensive player. Consequently, he is subject to block ing-out efforts by the opponent who is operating from an interior position. The resulting problem of obtaining good rebounding position explains the added difficulty in rebounding offensively. This difficulty is accentuated by the fact that most players are naturally waiters, rather than mixers.

2. Extra stamina is necessary if the

at California. John Ford of Rotan, Texas, High School, and Van Howe of Decatur, Illinois, High School, are now on the staff at Arizona. Howe interspersed a stay at Illinois Weslevan with a highly successful career at three Illinois high schools. After coaching at Maury High School in Norfolk, Virginia, and the Bullis School, Ralph Hendrix is handling the line for Ben Martin's new staff at Virginia. . . . It is with regret that we announce the death of Jim Bonnet. lim was one of the most well liked fellows in the sporting goods field. He handled a number of lines of sporting goods including Wilton, King-O'Shea, and Wright Products.

## The Guard

(Continued from page 8)

team the best chance to score by directing the offense to the weaknesses of the defense. Coaches who have not given their guards the responsibility of correct play selection will find it worth a trial.

The accompanying diagrams show the play sequence of the guards. These plays can be run either to the right or

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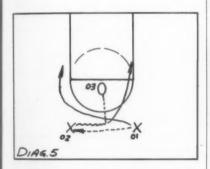
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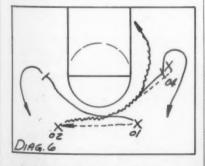
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In the play shown in Diagram 5, 01 passes to 02 and screens for him. 02 starts to his right and passes to the post, 03. 02 and 01 split the post.



As shown in Diagram 6, 01 passes to 02 and screens, 02 can dribble to his right and ge all the way to the goal or pass off to 04 and screen for him.



For further information see Service Coupon, page 68



MOLDED of solid "Tenite," the "RTB" single bar face protector is now available in colors. Simple to attach to any helmet, it is offered in four colors – royal blue, scarlet, Kelly green, and white as well as a clear plastic. With these colors it is possible in most cases to match the color of the helmet itself or the stripes. The material, "Tenite," is the same as that used in the top feature "Head Cushion" helmets made by Rawlings. Rawlings Sporting Goods Co., 2300 Delmar Blvd., St. Louis 3, Mo.

NEW for table tennis this season is the F-30 "Fold'N'Roll" table. It is constructed of first quality 3/4 inch plywood and has a two-coat satin finish of green lacquer. When folded for storage the table is less than 12 inches wide, 5 feet high, and 5 feet deep. Complete with casters it is entirely portable and is very reasonably priced. Manufactured by Brinktun Inc., 710 N. 4th St., Minneapolis 1, Minn.





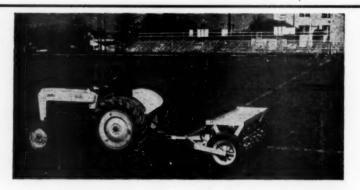
W RESTLING has long been in need of a means of scoring bouts and making this information available to spectators. The brand-new "Wrestling Scorer" should fill this need. It employs numbered cards which are flipped over as the occasion requires. Mohawk Valley Sports, Inc., Little Falls, N. Y.

THIS 24-page booklet, "How to Sweep and Mop Floors," will prove a real boon to school maintenance personnel. The material contained in it is based on careful job analysis and extensive scientific research. It shows the best and quickest way to sweep and mop all floors. Primarily a picture book, the best methods of mopping large areas such as gymnasiums, and sweeping and mopping techniques, are illustrated. The booklet is free from Huntington Laboratories, Inc., Huntington, Ind.





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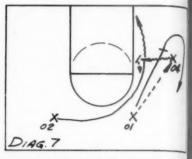
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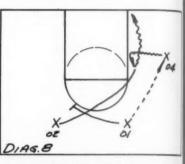
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In the play shown in Diagram 7, () passes to 04 and screens for him. 04 drh bles toward the center and passes off to () for a drive to the goal.



As shown in Diagram 8, 01 passes to 8 and screens for 02. 04 dribbles toward the center and passes off to 02 who drives for the goal.

# Wrestling

(Continued from page 10)

matches where the contestants work only shorts and sneakers for a uniform. This manner of dress is not to be advocated because of unseemly exposure.

We believe the minimum in a uniform should be the full-length tights an outer supporter or a pair of trunks to hold up the tights which are equipped with only a drawstring, and regular sneakers.

Usually, the tights have a leather, plastic or cloth patch over the knee

MEARL GREENE earned three letters in wrestling and went to the semifinals of the NCAA while an undergraduate at Alfred University. He instituted wrestling at Peekskill Military Academy and last year started the sport at Portville, New York, High School. Greene coaches wrestling at Portville in addition to being on the physical education staff at St. Bonaventure College.

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for protection. Most wrestlers find this inadequate and prefer to use the sponge-rubber type knee pad which can also double as an elbow pad. Tights and shorts look best in contrasting colors-generally, the school's colors. Shirts are not required, but a robe or sweatshirt is necessary for use while the contestant is not wrestling.

Protective headgear is strongly recommended by the rules committee. Use of headgear prevents damage to the ear from a blow or rubbing on the mat which may result in a disfiguring cauliflower ear. Although wrestlers object to wearing headgear, it is best to have several on hand for those who do wish to wear them. Some coaches insist that headgear be worn at all times; others require it only for matches. The preferred type seems to be the perforated plastic ear cover with canvas webbing around the head and chin.

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Special Meet Equipment. For meets, three stop clocks are necessary; one for overall match time, and two for time advantage on each wrestler. For match time, many schools use the basketball time clock where all can see it and keep match score on the scoreboard. Meet score may be kept on a portable blackboard. Two additional stop watches are used to record time-out in case of injury to a wrestler.

Benches or chairs should be placed on opposite sides of the mat for the teams. At each bench there should be drinking water and a box filled with sawdust for expectorating.

The Cost. No doubt, there will be objections raised against starting a new activity because of the expense involved. The initial cost for wrestling is quite high but after that the only annual expense is the addition or replacement of uniforms. With proper care the mats and covers will last for years.

The initial cost for equipment would approximate the following:

	Eighteen mars () X (U)	
	@ \$55 eq\$	990.00
2.	One plastic mat cover (22 ft.	
	sq.) @ 29c per sq. ft	140.00
9	Ton will me fel for a	1.40.00

3. Ten uniforms (tights, trunks, sweatshirts) 100.00 4. Miscellaneous (headgear and knee pads) 15.00

Total

\$1245.00

Most schools have some 5' x 10' mats on hand for other activities. Use of these will constitute a considerable saving in the initial cost.

When the initial cost of instituting wrestling in the interscholastic program is compared with the annual cost of other sports, we believe it fair to state that, relatively speaking, wrestling is not an expensive sport.





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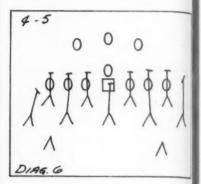
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Send to Dept. A for booklet on four other models H. & R. MFG. CO., LOS ANGELES 34, CALIF.

# Try the 4-5 Defense

(Continued from page 11)

fense shown in Diagram 6. Each man plays man-for-man. On a fourth down with inches to go, the 4-4 defense has worked better.



Invariably, the question of covering a flanker arises. Naturally, we must adjust to meet this situation and would use the defense which is shown in Diagram 7.

Our right corner backer-up plays the flanker man-for-man, while the left corner backer-up becomes a half-back. In the event of a pass our three deep men play a zone defense. If the scouting report permits, the 4-2 defense is used in case of a flanker. Of course, this procedure can be changed at any time. In the event of a split end, we attempt to play it the same way.

Offensively, we are basically a split T team. Since our boys have most of their trouble with teams that maneuver defensively on them all the time, we are convinced the 4-5 has many good maneuvers to offer. We would suggest putting a team on offense and having the players run against this defense. The ends will not like being hit, the tackles will not be as strong for they will stand up, and the guards will not like the slants and loops of the defense.

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THE ATHLETIC JOURNAL

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## Free Lance Offense

(Continued from page 18)

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In the play shown in Diagram 4, 01 has the ball again and he passes to 02 and then goes to pick for 05. 05 cuts and picks for 04, who cuts; if 04 is picked up, he reverses and goes up to pick for 03.

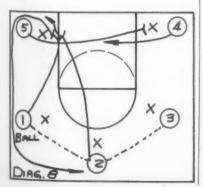
Double picks can be worked in without changing the pattern of play or giving any signal to teammates. In order to keep it simple we will start the play with the front man (Diagram 5). 02 passes to 01 and goes to set a pick for 03. 04 sees what 02 is doing so he goes with him to help him out and also set a pick for 03.

If 02 continues by 03 without stopping, 04 should see that no pick is developing there and get back into his corner (Diagram 6). As 03 starts his cut and sees that 02 is not stopping to pick his man off, he follows

WHEN Jack Clark gradu-ated from Cortland State Teachers College in 1949 he immediately entered the coaching field. For several vears he assisted, then was head coach at Clifton Springs, New York, for one year, and has been at his present location for three years. Clark's teams have won 90 per cent of the games played. His teams have also won the sectional finals twice.

him to the corner and then they have a double pick set for 04.

In the play shown in Diagram 7, the flanker, 01, has the ball. He passes in to 05 and then picks for 03. 02 breaks off his tail as he goes by and also stops to pick for 03, who cuts off 02's tail. After the pick, 01 moves back out for a return pass from 05.



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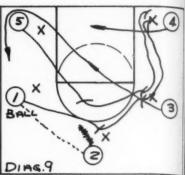
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In the meantime, 03 picks for 05, and 02 continues to pick for 04. In this case 04 would cut first and then continue over to complete the double pick for 05.

Diagram 8 shows 01 passing to 02. Then 02 passes to 03, and both 01 and 02 go and pick for 05, who cus and picks for 04. 01 comes back out to meet the ball. Then 02 moves into the corner and waits for a pick for 04 after his cut.

In the play shown in Diagram 9, 01 passes to 02. Then 05 and 01 more out together to pick and screen for 02 02 starts a drive and stops if he is picked up. Then 01 and 05 move to pick for 03, who cuts. As their pick are used, 01 and 05 move to pick for 04, who cuts. In the meantime, 03 has continued out to the side for a pass from 02 and now he becomes the feeder.

Diagram 10 shows 01 passing to 02. Then 01, 03, and 05 go to the command pick for 04. After 04 cuts, the player who picked first cuts. In this case it is 01. 03 moves out to get the pass from 02. 05 can pick or screen for 03, with 04 coming out to pick for 02. Then 03 has the option of showing, driving, feeding or coming out to start play over.

These ten diagrams and descriptions are only a few of the possible plays and options that can be used.

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## **Intramural Award**

(Continued from page 24)

least number of forfeits is the award Provision 4. Of the organizations thus qualified, the group with the winner.

This provision was included to discourage forfeits and to encourage entry into sports only when interest exists. It was decided that a forfeit in any sport should receive equal weighting. However, with several different types of schedules being used, it became necessary to establish what actually constituted a forfeit in each sport.

\*\*Provision 5. In the event of a tie in the number of forfeits, the group having the higher sportsmanship rating will be declared the winner.

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The final regulation was provided only to break a tie. A return to sportsmanship seemed justified since the percentage included in the sportsmanship provision constituted a rather wide range.

This award is showing results in increased participation, improved sportsmanship, and decreased forfeits. Although it has not been in effect long enough to provide wholly conclusive evidence, indications of increased interest in the program are apparent.

## Basketball Curriculum

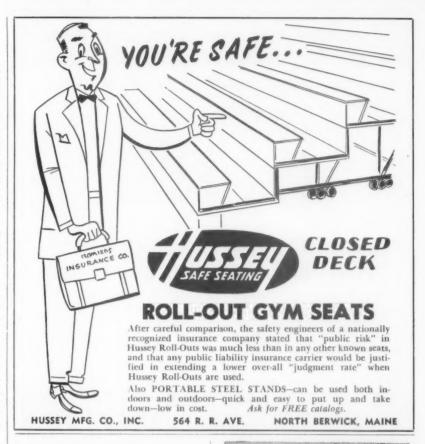
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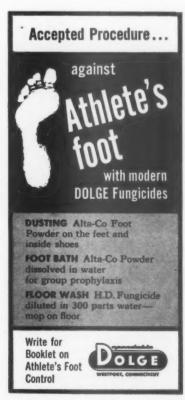
minutes).

4. Top it off with a special basket-ball event (5-10 minutes).

If possible, have balls available (at least one for each four or five students) before class starts, and work individually with the boys on fundamental skills. This individual work with the students will help in the relationship between the instructor and the class. It will also offer the opportunity to work with those who are less gifted physically and will assist in bringing them closer in ability to the average boy in the class. Advanced techniques can be given to those who are able to progress faster at this time. Each instructor can utilize these few minutes, while the students are reporting for class, to whatever he believes will be of value to the individual at that particular time.

The relative times for each portion of the daily lesson plan are flexible and should be adjusted to fit the needs of the group and the material that is to be presented. It is suggested that each class period be adequately prepared in advance, with the time







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for each activity included so that the instructor and the class are not car ried away by a particularly interesting aspect of the game and forget the other items that were to be offered that day. Also, it is recognized that the time to end an activity is when interest and enthusiasm are high. is then that the students will look forward eagerly to participating in that activity the next time it is presented.

#### Warm-Up Drill

The warm-up drill period is de signed to bring every member of the class into the activity in a vigorous manner. It should be a relatively simple drill so that the activity can start with very little explanation. Basic fundamentals such as shooting passing or dribbling, or a combination are ideal for this phase of the class period. Blair Gullion published 100 fundamental basketball drills Among these are many that fit the warm-up drill part of the daily lesson

#### **Review Basic Fundamentals**

When reviewing the basic fundamentals, each instructor will have to use his judgment as to what is necessary at that particular time in the overall course of study; what is necessary to bring the skill of the group up on a particular fundamental that is needed for that day; or review basic skills that are necessary for the dayto-day playing of basketball.

#### Major Item For the Day

The major item for the day which is taken from the course of study should be fully explained, demonstrated, and practiced so that all players understand it thoroughly and are able to go through the maneuver satisfactorily. It must be understood that complete comprehension and mastery within a short period of time is very difficult to realize; consequently, the instructor will have to be the judge as to how much his students should absorb. If the item is not mastered sufficiently to satisfy the instructor, it should be used at future class sessions as a part of the review in the daily lesson plan.

#### Top It Off With a Special **Basketball Event**

Regarding the concluding item on the majority of the daily sessions, it is recommended that the activities be topped off with a game, scrimmage, contest, or some aspect of baskethall in which there is a challenge and in which it is fun to participate. These special events should be varied so that

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1. Relays that feature basketball fundamentals: The instructor should have many teams with only four to six boys on a team so that there will he maximum participation and little time spent waiting for an opportunity to run, dribble, shoot, etc. A reward should be given to the winners, such as the first team to win twice takes an early shower. The losers should be penalized by having to do 10 push-

2. Shooting contests: Play the game 213, 4 or a variation of the long shot and follow shot by substituting the jump shot and the follow shot. The game may be varied by having the players shoot from different positions on the court.

3. Play two vs. two, or three vs. three, at one court5: An interesting variation is to have enough teams so that there is one game at each available basket. The instructor should have the teams play for two minutes, and at the end of that time, notify the winners to move clockwise to the next basket. In case of a tie, the team that has the tallest or the smallest player is declared the winner. The losers stay where they are except the team that is at the court which has been declared the championship area. The losers move from this one court only, and again clockwise. In this manner the teams quickly play one another, rotate in an orderly manner, and at the end of 6 to 10 minutes a class winner can be named. In order to minimize the confusion at each change of court, a rule should be made that the team which did not have to move takes the ball out of bounds to start the new game and this same team is instructed to change to either skin or shirt so the players do not conflict with whatever the newcomers are wearing.

4. Numbers basketball6: Numbers basketball can be played either as a full court game or as a half-court game. When played as a full court game, the rules and procedures are similar to the half-court game, except that actual full court basketball game conditions exist. The teams line up with half of the class along one end line and the other half along the opposite end line, with the coach tossing the ball to start each new period. The teams, one vs. one, two vs. two, three vs. three, four vs. four, five vs. five, or as many as the coach desires to call

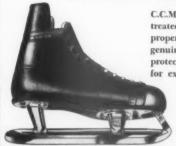
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Little Falls, N. Y.

out can play a time limit or a certain number of points if they are scored before the time limit is up. It is recommended that four points end an individual contest or it be called at the end of one minute and a half, whichever comes first. By calling fouls and observing all the rules of the regular game, this activity will become a popular one with the class.

5. Basketball golf: Basketball golf presents a challenge and a stimulating method of using competition when shooting. It is recommended that in contrast to Gullion's7 placing of the spots from which to shoot, the locations be varied from 10 to 25 feet from the basket. Par for the course should be a long shot and a follow

for each hole played.

6. Five vs. five half-court: This game should be regulated and controlled by the coach with each team playing a specified offense against a specified defense. During the latter part of the course, the defense can be allowed to change from a man-forman to a zone and vice versa. Playing this way will present a challenge to the offense and also allow the defense to use their own strategy. Extra players can be substituted when a certain number of points have been made or on a time limit. Two or more controlled scrimmages can be in progress at the same time with the coach giving his attention first to one and then to the other. Boys not playing, or substitutes, can act as referees.

7. Five vs. five full court: The class should be divided into an even number of groups with from seven to eight players on a team. As many games should be played as there are full courts available, with substitutes entering at specific time intervals. If the classes are large, make a game two out of three, or three out of five baskets so that everyone has a chance to participate.

#### Course of Study

Lessons 1 and 2: Orientation to basketball.

1. Discuss the background and development of the game.

2. Discuss the objectives and the overall plan of the course of study.

3. Suggest a film which will stimulate interest in the basketball course of study and that will either show outstanding basketball as it is played today, or point out and show how to execute the various fundamentals.8,9

Lesson 3: Practical skill test. Determine the individual ability of each student in the class and, at the same time, the general overall class ability.

Lessons 4 through 10: Fundamentals. The duration of each fundamental drill should depend upon the ability of the class to accomplish satisfactorily that particular fundamental. Some of the fundamentals should be given only a few minutes while others will have to be repeated each day as a warm-up or review drill. It is also important to point out the purpose and use of each particular fundamental. Each one should be practiced as it would appear in a game situation so that the use of it becomes natural to the player.

1. Shooting should consist of the lay-up, jump, one-hand set, two-hand set, pivot, hook, free throw, and tip in shots. Each student should be exposed to these common shots so that he can experience each one and adopt those which best fit his abilities in addition to those that are essential to each basketball player.

2. The push or chest pass, bounce, baseball, hook, and hand-off by the pivot men or to a man cutting by should be taught.

3. Dribbling.

4. Rebounding - offensive and defensive.

5. Footwork and faking.

Lesson 11: Offense (individual). Individual offense with the play and part of the participants in various positions, forward, center, and guard.

Lessons 12, 13, and 14: Offense

1. Team offense vs. man-for-man defense. It is recommended that the offense be built by playing 1 on 1, 2 on 1, 2 on 2, etc.<sup>10</sup> At the same time, different types of offense should be demonstrated such as moving and stationary screen types and revolving

2. Team offense vs. man-tor-man

full court press.

Lessons 15, 16, and 17: Offense (team). Team offense11 vs. zone defenses including the zone press.

#### Selected References

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11Lindeburg, F. A., The 1-3-1 All-Purpose Zone Offense. The Athletic Journal, Dec.

Lessons 18 and 19: Fast break. Lesson 20: Stalls.

Lessons 21, 22, 23, and 24: Defenses 1. Individual defense and method of guarding the man with the ball a a man at various positions on the floor without the ball.

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2. Special defensive situations such as 2 on 1 and 3 on 2.

3. Team defense with special enphasis on man-for-man and basic zone defenses.

Lessons 25, 26, 27, and 28: Round robin tournament.

Lesson 29: Practical skill tests it peated.

Lesson 30: Written examination.

#### Organization of the Round Robin **Tournament**

In a round robin tournament the overall organization and play will & pend upon the number of full cours available. The class should be di vided into teams of seven or eight players on a team, either by arbitran selection on the instructor's part, by selection from among team captains or in some manner that will provide teams of approximately equal abiling One boy should be appointed a elected captain of each team and made responsible for the team or ganization, play, and strategy. Require substitutions when rest period are taken every five minutes or so Post the full schedule, record the scores, and maintain the up-to-date standings. In this manner the player will always know where they stand and on which team they are to play

#### Grading

At the conclusion of the course, the instructor will have at his disposal objective and subjective items that will enable him to determine the ability and knowledge of each basket ball player in his class. The amount of improvement and the individual ability of each student can easily be determined by comparing the begin ning and final practical skill tests.

Daily performance should be considered because it offers evidence of how the individual is attaining the objectives of the course. Easily of served are sportsmanship, knowledge of the game, aggressiveness, the will in win, and the ability to learn and ap ply the fundamentals of basketball in playing the game. The final result of the round robin tournament wil indicate those players who have, a the end of the course, the ability # play basketball in a team effort.

It is suggested that at the conclusion of the basketball course, a short with ten examination be given to all meebers of the class.

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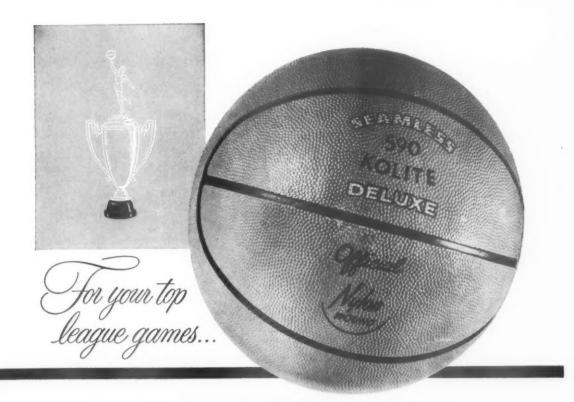
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